nuary

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Nephrotropic; cytostatic; human; kidney disease associated; hyper Bartter's syndrome; Gitelman syndrome; nephrolithiasis; renal fairenal amyloidosis; primary aldosteronism; Addison's disease; canc glomerulonephritis; dysplastic malformation; medullary cystic dismedullary sponge kidney; tubular dysplasia; Alport's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human kidney disease associated protein SEQ ID 11.
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ABU58043
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ABU58974
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ABU13934
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AAE05362
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ABR47467
ABJ37036
ABP75985
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  28-MAR-2000; 2000WO-US08260.
(INCY-) INCYTE PHARM INC
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N-PSDB; AAC66135.
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Membrane-bound pro
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| SIDSI/gcgdata/geneseqy_embl/AAl984.DAT:*
| SIDSI/gcgdata/geneseqy_embl/AAl986.DAT:*
| SIDSI/gcgdata/geneseqy_embl/AAl986.DAT:*
| SIDSI/gcgdata/geneseqy_embl/AAl980.DAT:*
| SIDSI/gcgdata/geneseqy_embl/AAl991.DAT:*
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| SIDSI/gcgdata/geneseqy_embl/AAl996.DAT:*
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(c) 1993 - 2004 Compugen Ltd.
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'disease associated gene useful for diagnosing treating and enal disorders, is uromodulin, NKCC2, NCCT, aldolase B, il, PDZK1, NPT1, calbindin, kininogen or CIC-Kb

e 35-36; 36pp; English.

des AAC66131-C66139 represent human kidney disease fenes. Proteins AAY85678-Y85680 represent human kidney disease roteins. The polymucleotides have nephrorropic and cytostatic polymucleotides, encoded proteins and pharmaceutical containing them are useful for diagnosing, prognosing, i preventing renal disorders such as Bartter's syndrome, idrome, autosomal dominant polycystic kidney disease and usis. The genes and perceins are also useful for identifying that are associated with a specific disease, regulatory cellular compartment, cell type, tissue type or species, ful in diagnosis, prognosis, treatment and evaluation of a renal disease for e.g. renal amyloidosis, hypertension, which is a start of the start of hritis, chronic glomerulonephritis, tubulointerstitial ystic disorders and dysplastic malformations, inherited enal disease (PRD), medullary cystic disease, medullary y and tubular dysplasia, Alport's syndrome, non-renal hey adenocarcinoma, metastatic renal carcinoma, multiple nephrotoxic disorders.

ö VTLALLILLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60 0; Gaps 100.0%; Score 461; DB 21; Length 89; 100.0%; Pred. No. 1.2e-50; 0; Indels 0; Mismatches Conservative

VTLALLLLAGLTALEANDPFANKDDPFYYDWRNLQLSGLICGGLLAIAGIAAVLSGK 60

KSSOKOHSPVPEKAIPLITPGSATTC 89

ndard; Protein; 89 AA

(first entry)

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peptide containing protein HSPP-35 SEQ ID NO:35.

l peptide-containing protein, HSPP; diagnosis; cancer; cardiovascular disease; anticancer; anti-inflammatory; cardiovascular hepatotropic; c; gene therapy; cell proliferation; neurological disorder; developmental disorder; arteriosclerosis; soriasis; acquired immune deficiency syndrome; anaemia; n's disease; infection; Alzheimer's disease; schizophrenia; disease; Huntington's disease; ovulatory defect;

99WO-US14484. 98US-0090762. 98US-0094983 98US-0102686.

Membrane-bound polypeptide; PRO polypeptide; LDL receptor; TIE l pharmaceutical; receptor immunoadhesin; gene mapping.

Homo sapiens. WO9963088-A2.

Membrane-bound protein PRO1069.

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human signal peptide-containing proteins HSPP-1 to HSPP-134. HSI human signal peptide-containing proteins HSPP-1 to HSPP-134. HSI anti-inflammatory, antimicrobial, noctropic, hepatot neuroprotective, cardiovascular and antiasthmatic activities, are associated with decreased activity or function of HSPP. Antagon: HSPP are used to treat or prevent disorders associated with increased activity or function of HSPP. Such diseases include cell prolife activity or function of HSPP. Such diseases include cell prolife (including cancer), inflammation, cardiovascular, neurological, reproductive or developmental disorders (e.g. arteriosclerosis, cirrhosis, psoriasis, acquired immune deficiency syndrome, anamy, crohn's disease, microbial or other infections, congestischaemic heart disease, Alzheimer's, Parkinson's or Huntington' diseases, schizophrenia, ovulatory defects, muscular dystrophy) as chartened ac acids can be used for the recombinant production of HSPP detecting HSPP in standard hybridisation and amplification assay diagnosis and monitoring), in gene therapy, as antisense, triplex-forming or ribozyme therapeutics, for detecting related craise specific antibodies (Ab) and to screen for agonists and antagonists (potential therapeutic agents). Ab are used to diagrant antagonists, in competitive drug screens, and for purification of from natural sources.
                                                                          Baughn I
R, Hill
                                                                                                                                                                                                  New human signal peptide-containing proteins useful in treatment prevention and diagnosis of e.g. cancer, inflammation and cardiovascular disease
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                                                                     Gorgone GA, Corley NC, Guegler KJ, Ba
Young J, Yue H, Patterson C, Reddy R,
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                                                                                                                                                                                                                                                                           Claim 1; Page 182; 327pp; English.
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 98US-0112129.
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                                (INCY-) INCYTE PHARM INC.
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Akerblom IE, Au
11-DEC-1998;
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Watanabe CK;
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98US - 0090690

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98US - 00901360

98US - 00911369

98US - 00911408

98US - 00911628

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98US - 00979797
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Yuan J;
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Wood WI,
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                             99WO-US12252
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ve homology with proteins including LDL receptors, TIE various enzymes. The membrane-bound proteins and receptor e useful as pharmaceutical and diagnostic agents. Receptor is, for instance, can be used as therapeutic agents to block and interactions. The membrane-bound proteins can also be screening of potential peptide or small molecule inhibitors ant receptor/ligand interaction. The PRO encoding sequences shybridization probes, in chromosome and gene mapping and in of antisense RNA and DNA. PRO nucleic acid sequences useful for the preparation of PRO polypeptides, especially
                                                                                                                                                                          in provides membrane-bound PRO polypeptides and des encoding them. The PRO sequences of the invention were assed on extracellular domain homology screening. The PRO
ind proteins and related nucleotide sequences
                                                                                  g 180; 822pp; English.
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9 AA;

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100.0%; Score 461; DB 21; Length 89; 100.0%; Pred. No. 1.2e-50; ive 0; Mismatches 0; Indels C
                                                  Conservative
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KSSQKQHSPVPEKAIPLITPGSATTC 89

ndard; Protein; 89 AA.

(first entry)

lypeptide sequence #100.

ide, mammal, tumour, cancer, human, cattle, horse, sheep, 3; goat, rabbit, tumour necrosis factor alpha, TNF-alpha, rocyte cell; cell proliferation, cell differentiation, colon, 3; breast; prostate, rectum; cervix, liver; genetic disorder.

12.

2000WO-US05601. 2000WO-US05841. 2000US-187202P. 2000US-191048P. 2000US-191314P. 2000US-192655P. 2000US-190828P. 2000US-191007P. 2000US-186968P. 2000US-189320P. 2001WO-US06520 2000US-189328P 2000WO-US06884

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29-MAR-2000; 2000US-193032F.
30-MAR-2000; 2000US-193032F.
30-MAR-2000; 2000US-194449F.
04-APR-2000; 2000US-194449F.
11-APR-2000; 2000US-195975P.
11-APR-2000; 2000US-19600P.
11-APR-2000; 2000US-19600P.
11-APR-2000; 2000US-19600P.
11-APR-2000; 2000US-19600P.
11-APR-2000; 2000US-19600P.
18-APR-2000; 2000US-199397F.
25-APR-2000; 2000US-19955P.
25-APR-2000; 2000US-19955P.
25-APR-2000; 2000US-19956P.
17-MAY-2000; 2000WO-US14042.
30-MAY-2000; 2000WO-US14042.
                                                                                                                                       05-UUN-2000; 2000US-209832P.
28-UUL-2000; 2000WO-US20710.
22-AUG-2000; 2000WO-US33328.
24-AUG-2000; 2000WO-US33952.
01-DEC-2000; 2000WO-US30952.
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(GETH) GENENTECH INC.

Godowski PJ, Gurr Desnoyers L, Goddard A, Godo tanabe CK, Wood WI, Zhang Z; Chen J, Desucier V. Watanabe CK, Smith V, Baker KP, Pan J,

WPI; 2001-602746/68. N-PSDB; AAS46024. Novel nucleic acids encoding PRO polypeptides, used to diagnose presence of tumours, such as prostate and breast tumours, in man to screen for modulators of the compounds -

Claim 11; Fig 200; 774pp; English.

Sequences AAU29024-AAU29328 represent PRO polypeptides of the in detect the presence of a tumour in a mammal by comparing the lev expression of a PRO polypeptide in a test sample of cells from t and a control sample of normal cells, whereby a higher level of expression in the test sample indicates the presence of a tumour mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, and rabbits but are preferably human. The polypeptides can be us timulate tumour necrosis factor (TNF) alpha release from human when contacted with it. A specific polypeptide can be used to be proliferation of chondrocyte cells. The proteins can be used to determine the presence of tumours and all customs can be used to determine the presence of tumours and all customs. breast, prostate, rectal, cervical, or liver tumours, in mammali subjects. The oligonucleotide probes specific for the PRO nuclei can be used for genetic analysis of individuals with genetic dis-

89 AA; Seguence

·; 100.0%; Score 461; DB 22; Length 89; 100.0%; Pred. No. 1.2e-50; cive 0; Mismatches 0; Indels (Local Similarity 100. les 89; Conservative Query Match Matches

1 MERVILALLILAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAA 1 MERVILALLILAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAA

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dard; Protein; 89 AA.
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(first entry)

otein; mapping

2000WO-US23328

99WO-US21090. 99US-0169495. 99US-0170262. 2000WO-US04342. 2000US-0175481, 2000WO-US04341. 2000WO-US05601 2000US-0187202 2000US-0199397 :000WO-US14042 2000US-0209832

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PECH INC.

Goddard A, Godowski PJ; Wood WI; Gerritsen ME, Watanabe CK, Gurney AL, lvaroff E,

260/18.

soleic acids encoding PRO polypeptides, useful in logy, including use as hybridization probes, and in gene mapping.

50; 278pp; English.

Squence is a human PRO polypeptide (secreted and the PRO protein, and PRO agonists, PRO antagonists or sodies are useful for preparation of a medicament useful in of a condition which is responsive to the PRO protein, agonists or anti-PRO antibodies. The PRO protein may also be alecular weight markers for protein electrophoresis. The PRO protein may also be than applications in molecular biology, including use as probes, and in chromosome and gene mapping.

0; Gaps 100.0%; Score 461; DB 22; Length 89; 100.0%; Pred. No. 1.2e-50; ive 0; Mismatches 0; Indels onservative

LIALLILAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK TLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK

SOKOHSPVPEKAIPLITPGSATTC 89

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Human; secreted and transmembrane protein; PRO; cytostatic; cell death; cancer; chromosomal mapping; gene mapping; tissue tygidagnostic assay.
                                        Human PRO1069 (JNQ526) protein sequence SEQ ID NO:262.
     AAB65228 standard; Protein; 89 AA.
                                                                                                                                 99US-0141037.
99US-0143048.
99US-0144758.
99US-0146222.
99US-0146222.
99US-0146220.
99US-0146220.
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99WO-US30095
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2000WO-US06884
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                                                                             Homo sapiens.
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                             02-APR-2001
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                 AAB65228;
AAB65228
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(GETH) GENENTECH INC.

Baker KP, Botstein D, Desnoyers L, Eaton DL; Mg S, Gerber H, Gerritsen ME, Goddard A, Godows Gurney AL, Kljavin IJ, Napier MA, Pan J, Paoni rt TA, Tumas D, Watanabe CK, Williams PM, Wood Ashkenazi AJ, Ban,
Ashkenazi AJ, Ban,
Taza N, Fong S, Geilu,
Taza Tume Zhang Z;

WPI; 2001-032160/04. N-PSDB; AAF44191. PRO polynuclectides used to produce polypeptides used to target bioactive molecules such as toxins, radiolabels or antibodies, to specific cells, to cause targeted cell death -

Claim 12; Fig 180; 935pp; English.

The present invention describes human secreted and transmembrane proteins. The PRO proteins have cytostatic activity. The PRO proteins based for targeted delivery of bioactive molecules, such as toxins, radiolabels or antibodies, that cause cell death. PRO nuc sequences, and their fragments, can be used as hybridisation probahromosomal and gene mapping, and in the generation of anti-sense and DNA. They may also be used to produce transgenic animals which used to develop and screen therapeutically useful reagents. The Pronucleotide and protein sequence can be used for tissue typing and

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icer. Anti-PRO antibodies can be used in diagnostic assays. AAF4470 represent PCR primers and hybridisation probes used thion of human PRO sequences. AAF44097 to AAF44269 and AAB65300 represent human PRO polynucleotide and protein ven in the exemplification of the present invention.
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9 AA;

VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60 VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60 0; Gaps Length 0; Indels Score 461; DB 22; Pred. No. 1.2e-50; 0; Mismatches 100.0%; Conservative larity

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KSSQKQHSPVPEKAIPLITPGSATTC 89 KSSQKQHSPVPEKAIPLITPGSATTC 89

ndard; Protein; 89 AA.

ed/transmembrane protein PRO1069.

ted protein; transmembrane protein; antirheumatic;
c; osteopathic; sports-related joint problem;
rtilage defect; osteoarthritis; rheumatoid arthritis.

2001US-0006867

98US-082797P. 98US-083495P. 98US-085579P. 98US-088811P. 98US-088824P. 98US-088825P. 98US-088863P. 98US-089105P. 98WO-US19330. 99WO-US05028 99WO-US30720. 99WO-US21194 2000WO-US04341 2000WO-US04342 2000WO-US08439 2000WO-US15264 99WO-US10733 99WO-US21090 99WO-US20111 2000WO-US23522 2000WO-US30873 SU-0W66

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The invention relates to an isolated secreted and transmembrane polypeptide having 80 % sequence identity to a sequence appearing to as ABSG9851-ABG9594 or their associated signal peptide, or a sequence as ABG95851-ABG9594 or their associated signal peptide, or a sequence as ABG95851-ABG9594 or their associated signal peptide, or a sequence or lacking its associated signal peptide. Also included the nucleic acids encoding the proteins, vectors, host cells, the proteins are useful for detecting a polypeptide designated set or by proteins are useful for detecting a polypeptide designated set or or by proteins are useful for detecting a polypeptide designated as E, F, I (or vice versa) and determining the formation of a A/E, B/F, I (or vice versa) and determining the formation of a A/E, B/F, I (or vice versa) and determining the formation of a A/E, B/F, I (or vice versa) and determining the formation of a A/E, B/F, I (or vice versa) and determining the formation of a A/E, B/F, I or polypeptide, conjugate in the sample, where A is a PRO1072 polypeptide, B is a PRO2011 polypeptide, C is a PRO10096 polypeptide, D is a PRO1976 polypeptide, H is a BRO2033 polypeptide and I is a PRO2019 polypeptide. The sample comprises a cell suspected of expressing a detectable label or is attached to a solid support: The protein useful for linking a bioactive molecule to a cell expressing a polypeptide designated as A, B, C or D or E, F, G, H or I. The causes death of the cell. A, B, C, D, E, F, G, H, Or I or and expressing a polypeptide designated designated designated designated designated as A, B, C or D or E, F, G, H or I. The against them are useful for modulating a biological activity of expressing a polypeptide designated de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        therapeutic useful reagents, for chromosome identification, and therapy. The antibody is useful as a therapeutic agent, in a diacassay and for affinity purification of the protein from recombincell culture natural sources. The present sequence represents a secreted or transmembrane protein of the invention.
                                                                                                                                                                                                                                                                                                          New isolated secreted and transmembrane PRO polypeptide useful f modulating biological activity of a cell, or for treating sports-related joint problems, osteoarthritis or rheumatoid arth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   molecular weight markers for protein electrophoresis purposes, a thorapeutic agents for treating sports-related joint problems, articular cartilage defects, osteoarthritis or rheumatoid arthri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acids encoding the proteins are useful as hybridisation in chromosome and gene mapping, in the generation of anti-sense DNA, for the preparation of the proteins, to generate transgenic knockout animals which are useful in the development and screeni
                                                                                                                                                                 Godowski PJ
                                                                                                                                                              Goddard A,
                                                                                                                                                                                      Wood WI;
                                                                                                                                                           Gerritsen ME,
Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 20; Fig 50; 399pp; English.
                          2001WO-US21066.
2001WO-US21735.
  20-JUN-2001; 2001WO-US19692
                                                                                                                                                                                      Gurney AL,
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                                                                                                      (GETH ) GENENTECH INC
                                                                                                                                                         Filvaroff
                                                                                                                                                                                                                                 WPI; 2002-731348/79.
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                          29-JUN-2001;
                                                                                                                                                                                    Grimaldi
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89 AA; Sequence

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1 MERVILALLLLAGLIALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAN
                                                                                      1 MERVILALLILAGLIALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAV
                                   ..
    Length 89;
                                 Indels
                                   ..
100.0%; Score 461; DB 23; 100.0%; Pred. No. 1.2e-50
                                Mismatches
                                .;
0
                              89; Conservative
               Similarity
   Query Match
                  Local
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2001WO-US06520

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97US - 066466P

97US - 069425P

97US - 069425P

97US - 069470P

97US - 069470P

98US - 0774512P

98US - 078866P

98US - 078933P

98US - 081195P

98US - 081414P

98US - 08112P

98US - 088112P

98US - 088111P

98US - 088111P

98US - 088111P

98US - 088111P

98US - 088811P

98US - 088811P
221-NOV-1997;
24-NOV-1997;
11-DEC-1997;
12-DEC-1997;
17-DEC-1997;
11-DEC-1997;
11-MAR-1998;
20-MAR-1998;
20-MAR-1998;
21-MAR-1998;
31-MAR-1998;
32-APR-1998;
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                                                                                                                                                                                                                                                                                 ecreted; transmembrane; cytostatic; TNF-alpha; blood; is factor alpha release; chondrocyte cell; proliferation; on; tumour; gene therapy.
                                                                                      dard; Protein; 89 AA
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98WO-US19330

98WO-US21141

99WO-US05028

99WO-US05028

99WO-US21011

99WO-US21011

99WO-US21011

99WO-US28301

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2000WO-US05041

2000WO-US0504

2000WO-US0504
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                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                      protein.
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New isolated antibody specifically binding a PRO polypeptide, use
for the preparation of a medicament for treating disorders with t
aberrant expression or activity of the PRO polypeptide, such as t
conditions and cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Godowski PJ;
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Wood WI;
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Watanabe CK,
                                                                                                                                                                                                                               Human; gene therapy; tumour; cancer.
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                                                                                                                                                                                   Human secreted polypeptide PRO1069
                                    ABU71530 standard; Protein; 89 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08 - MAR - 1999; 99WO - USD 50 20 8 1 4 - MAR - 1999; 99WO - USD 50 20 8 1 4 - MAR - 1999; 99WO - USD 50 20 8 1 4 - MAR - 1999; 99WO - USD 50 20 8 1 1 4 - MAR - 2000; 2000WO - USD 50 4 1 1 1 - MAR - 2000; 2000WO - USD 50 4 1 1 1 - MAR - 2000; 2000WO - USD 50 2 2 - MAY - 2000; 2000WO - USD 50 2 2 - MAY - 2000; 2000WO - USD 30 2 3 8 1 1 1 - NOV - 2000; 2000WO - USD 30 2 8 1 1 1 - NOV - 2000; 2000WO - USD 30 8 1 3 8 2 0 - BEC - 2000; 2000WO - USD 30 8 1 3 8 2 0 - BEC - 2000; 2000WO - USD 30 8 0 1 3 8 2 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 2 5 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - AUG - 1999; 99US - 03 8 0 1 3 9 0 1 8 - 25 - 20 - 20 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 2 0 0 0 1 8 - 25 - 20 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 0 0 1 2 0 
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99WO-US05028.
99WO-US10733.
99WO-US31274.
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3, Gurney AL,
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N-PSDB; ACA58834.
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Grimaldi JC,
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98US - 089559B - 98US - 089553P - 98US - 089553P - 98US - 089553P - 98US - 090246E - 98US - 090246E - 98US - 090246E - 98US - 0904444 - 98US - 0904444 - 98US - 0904444 - 98US - 0906461P - 98US - 090663P - 98US - 091626P - 98US - 09528P - 98US - 095689P - 98US - 096687P - 98US - 0969787P - 98US - 096977P - 98US - 099777P - 98US - 09873P - 98US - 09873P - 98US - 098821P - 98US - 098723P - 98US - 099741P - 98US - 099741P - 98US - 099741P - 98US - 099742P - 98US -
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Containing antibodies that specification. The methods and containing antibodies that specifically bind a PRO of the present invention are useful for the preparation of a rate treatment of disorders associated with the aberrant activity of the PRO polypeptide, such as tumour conditions hey can also be used to generate transgenic or knockout in the development and screening of therapeutically useful PRO polypeptides and encoding nucleic acids can be used as ght markers for protein electrophoresis, chromosome in and tissue typing. The PRO polypeptides are useful to enesis e.g wound healing, in the treatment of sports-related abetes: hyperinsulinaemia and hypoinsulinaemia. The ybe used in various diagnostic, competitive binding and/or tation assays. The present sequence represents the amino of a PRO polypeptide of the invention.

0; Gaps 100.0%; Score 461; DB 24; Length 89; 100.0%; Pred. No. 1.2e-50; Indels 0; 0; Mismatches onservative

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TLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLLCGGLLALAGIAAVLSGK 60

SSOKOHSPVPEKAIPLITPGSATTC 89 SSOKOHSPVPEKAIPLITPGSATTC

dard; Protein; 89 AA.

(first entry)

ecreted and transmembrane protein PRO1069

ed and transmembrane polypeptide; Sping; gene mapping; transgenic animal; knockout animal; Jent screening; chromosome identification; tissue typing;

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:002US-0063512.

ECH INC.

Godowski PJ; varoff E, Gurney AL,

ind transmembrane PRO polypeptides and nucleic acid dding the polypeptides, useful in gene therapy or dicament for treating a condition that is responsive to eptide or antibody

describes novel isolated PRO polypeptides. The PRO

polypeptides or anti-PRO antibodies are useful in preparing a me for treating a condition that is responsive to the PRO polypepti antibody. The PRO nucleotide Sequences may be used as hybridisat probes in chromosome and game mapping, or in generating antisens and DNA. PRO nucleic acids are also useful in preparing PRO poly in assays to identify other proteins or molecules involved in bireaction, to generate transgenic animals or knockout animals, who can useful reagents, for chromosome identification, and tissue typin PRO polypeptides and nucleic acid molecules are also useful in generaty, and as molecular weight markers for protein electrophory propried proposes. The anti-PRO antification of PRO from recombinant celections or for the affinity purification of PRO from recombinant celections. 1 MERVTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAN 1 MERVTLALLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAV Length 89; Indels 100.0%; Score 461; DB 24; 100.0%; Pred. No. 1.2e-50; 0 0; Mismatches 8 6 CKYKSSQKQHSPVPEKAIPLITPGSATTC 89 61 CKYKSSOKOHSPVPEKAIPLITPGSATTC 100.08; Conservative Local Similarity les .89; Conserv 89 AA; Seguence Query Match Matches 9999999999999988δ 셤 ò

ABU72133 standard; Protein; 89 AA

13-JUN-2003 (first entry)

Human PRO polypeptide #25.

Human; PRO polypeptide; secreted and transmembrane protein; anti-PRO antibody; diagnostic assay; gene expression.

Homo sapiens.

US2003023042-A1.

01-MAY-2002; 2002US-0063502.

30-JAN-2003.

06-DEC-2001; 2001US-0006867.

(GETH) GENENTECH INC.

Goddard A, Godowski PJ; Wood WI; Gerritsen ME, Watanabe CK, Filvaroff E, C, Gurney AL, Grimaldi JC, Gurney Eaton DL,

WPI; 2003-331484/31. N-PSDB; ACA63397.

Novel monoclonal antibody that binds to secreted and transmembrand polypeptide, useful for detecting and purifying the polypeptide at also for treating conditions responsive to the antibody

Disclosure; Fig 50; 408pp; English.

The present invention relates to the isolation of novel human PRO polypeptides, and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides and polynucleotides are useful for preparing a medicament useful in the treatment of a condition responsive to

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:001US-0006867.

Goddard A, Wood WI; Gerritsen ME, Watanabe CK,

84/31.

50; 409pp; English.

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Conservative

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01-DEC-2000; 2000WO-US32678.
20-DEC-2000; 2000WO-US34956.
28-FEB-2001; 2001WO-US06520.
01-UJN-2001; 2001WO-US17800.
20-UJN-2001; 2001WO-US21066.
09-JUJN-2001; 2001WO-US21066.
09-JUJN-2001; 2001WO-US21066.
18-SEP-1997; 97US-059263P.
                                                                                                                     97US-059263P.
97US-059266P.
97US-06256P.
97US-063486P.
97US-063121P.
97US-063121P.
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9705-063544P

9705-0637344P

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17-0CT-1997
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15-APR-1998;
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29-APR-1998;
05-MAY-1998;
06-MAY-1998;
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          VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60
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cibody. Anti-PRO antibodies are useful in diagnostic PRO, by detecting its expression in specific cells, serum, and for affinity purification of PRO from cell culture or natural sources. ABU72109-ABU72192 he human PRO polypeptides of the invention.
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                                                                                                            100.0%; Score 461; DB 24; Length 89; 100.0%; Pred. No. 1.2e-50; ive 0; Mismatches 0; Indels (
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2000WO-US04341. 2000WO-US04342. 2000WO-US04414. 2000WO-US05004.

99WO-US31274 2000WO-US00219

98WO-US21141 98WO-US25108

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2002US-0188767

99WO-US20111 99WO-US21090

99WO-US28301 99WO-US28551

99WO-US10733 99WO-US12252

99WO-US

2000WO-US08439. 2000WO-US13705. 2000WO-US14042. 2000WO-US14941.

2000WO-US05841. 2000WO-US06884.

2000WO-US05601

2000WO-US20710. 2000WO-US23328. 2000WO-US30952.

2000WO-US15264

98US-088033P 98US-088126P 98US-08812P 98US-08812P 98US-08812P 98US-08811P 98US-08811P 98US-08811P 98US-08811P 98US-08811P 98US-08811P 98US-08812P 98US-08812P 98US-08812P 98US-088812P 98US-088812P 98US-088812P 98US-088812P 98US-088812P 98US-088812P 98US-088812P 98US-08912P 98US-089538P 98US-089538P

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Human; secreted protein; transmembrane protein; cytostatic; gene Therapy; TNF-Agonist-Alpha; chondrocyte stimulator; tumour; adrenal tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour;
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100.0%; Score 461; DB 24;
Best Local Similarity 100.0%; Pred. No. 1.2e-50;
Matches 89; Conservative 0; Mismatches 0;
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98US-098821P.
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2000WO-US043142.
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PR 05-JUN-1998 | 98US-088217P
PR 10-JUN-1998 | 98US-088525P
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PR 110-JUN-1998 | 98US-080528P
PR 110-JUN-1998 | 98US-090124F
PR 110-JUN-1998 | 98US-090132P
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1 MERVILALLILAGLIALEANDPFANKDDPFYYDWKNLQLSGLICGGLLALAGIAAVI
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Smith V, Watanabe CK, Wood WI, Zhang Z;
                                                                                                           2000US-0644848.
2000US-064610.
2000US-0665350.
2000US-0709238.
2001US-0816744.
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                      980S-0202054
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2001US-0918585.
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2001US-0929404.
      98US-0168978
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N-PSDB; ACA05799.
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18-SEP-2000; 2
08-NOV-2000; 2
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                                                      TLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK
                                                                                                                                                                                                                                      and transmembrane protein; PRO; TNF-alpha; factor alpha; chondrocyte cell; tumour; gene therapy;
                                        Gaps
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                   ; Score 461; DB 24; Length 89;
; Pred. No. 1.2e-50;
0; Mismatches 0; Indels
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                                                                                            SSOKOHSPVPEKAIPLITPGSATTC 89
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                   100.08;
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Gurne

Godowski PJ,

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The invention discloses human nucleic acids encoding secreted and transmembrane (PRO) polypeptides. Also disclosed is an antibody to specifically binds to the PRO polypeptide, a method for stimulating release of tumour necrosis factor alpha (TNF-alpha) from human bluchacting the blood a PRO polypeptide, a method for stimulating proficial proficeration of inferentiation of chondrocyte cells by contacting the blood a PRO polypeptide, a method for stimulating to proliferation or differentiation of chondrocyte cells by contacting by nollecting sequences. The nucleotide sequences are useful as in chromosome and gene mapping, in generating antisense RNA and Dragating PRO polypeptides by recombinant techniques and in general properties by recombinant techniques and in general sequences. The nucleotide sequences is purposes, or protein electrophoresis purposes, chromosome identification, as chromosome markers, as therapeutic for stimulating the release of TNF-alpha from human blood, for stimulating the presence of a tumour. The PRO polypeptides and nucle acids may also be used diagnostically for tissue typing. The sequence of the in presented in ABUG7710 are the PRO polypeptides of the in
New secreted and transmembrane PRO polypeptides and nucleic acids useful in gene therapy, in chromosome and gene mapping, as chromcmarkers, in tissue typing, and in chromosome identification -
                                                                                                                                                                                                                                   Claim 11; Fig 200; 706pp; English.
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9705-063734P

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  cytostatic; chromosome mapping; gene mapping; trophoresis; tumour necrosis factor-alpha; TNF-alpha; blood; differentiation; chondrocyte proliferation; tumour.
             KSSQKQHSPVPEKAIPLITPGSATTC
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2000WO-US04414.
2000WO-US05004.
2000WO-US05601.
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2000WO-US15264.
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2000WO-US34956
2001WO-US17800
2001WO-US1969.
2001WO-US21036
2001WO-US21035
2001WO-US27039.
97US-059266P.
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99WO-USI0733
99WO-USI252
99WO-US20111
99WO-US28311
99WO-USSB51
99WO-US31274.
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TAALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60
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98US-089105P

98US-089513P

98US-08953BP

98US-08953BP

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98US-089553P

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61 CKYKSSQKQHSPVPEKAIPLITPGSATTC 89

Search completed: January 6, 2004, 16:02:53 Job time : 41 secs

SQUQUESTIC 89

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1 MERVILALLILAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAV.
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Patent No. 6478825
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Baker, Kevin P.
APPLICANT: Baker, Luc
APPLICANT: Baker, Luc
APPLICANT: Baten, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Botstein, David
Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: 1900433CD1
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Gerber, Hanspeter
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Best Local Similarity
Matches 89; Conserv
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US-09-996-243-262
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LENGTH: 89
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
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Sequence 54, Appl
Sequence 5, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 6, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 3, Appli
Sequence 1, Appli
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Sequence 424, App
Sequence 6, Appli
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Sequence 199, App
                                                                                        / Search time 22 Seconds
(without alignments)
171.167 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                      TERVTLALLLLAGLTALEAN.........HSPVPEKAIPLITPGSATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptcdata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/PcTUS_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/PcTUS_COMB.pep:*
GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-289-349-11

US-09-996-243-262

US-08-724-88-1262

US-08-725-814-5

US-08-728-81-4

US-09-213-392-4

US-08-289-247B-4

US-08-289-247B-4

US-09-213-392-4

US-09-213-392-4

US-09-213-392-4

US-09-213-392-4

US-09-213-392-4

US-09-247-155-120

US-09-247-155-120

US-09-213-392-1

US-09-213-392-1

US-09-213-392-1

US-09-213-392-1

US-09-213-392-1

US-09-149-476-473

US-09-149-476-606

US-08-149-476-606

US-08-125-531-19

US-09-149-476-606

US-08-149-476-606

US-08-149-476-606

US-08-125-23-405
                                                                                                                                                                                                                                                                                                   s satisfying chosen parameters:
                                                                                                                                                                                                                                                                    3717 segs, 42310858 residues
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iximum Match 100%
.sting first 45 summaries
                                                            in search, using sw model
                                                                                            6, 2004, 16:02:05
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Length 89; 0; Indels

100.0%; Score 461; DB 3; 100.0%; Pred. No. 8.5e-52; ive 0; Mismatches 0;

83

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Sequence
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Sequence
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Sequence
Sequence
Sequence
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Sequence
Sequence
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           Sequence
Sequence
   Sequence
                            Sequence
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NUMBER OF SEQ ID NOS: 12

SOFTWARE: PERL PROGRAM
US-08-738-127-6
US-09-213-392-6
US-09-213-392-6
US-09-268-140-2
US-09-198-452A-112
US-09-690-454-16
US-09-328-352-7324
US-09-336-643A-4
US-09-336-643A-4
US-09-107-522A-3725
US-09-1107-522A-3725
US-09-1107-522A-3725
US-09-1107-522A-3725
US-09-120-365-3
US-09-149-476-341
US-09-252-991A-28424
US-08-930-830B-5
                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                               US-09-289-349-11; Sequence 11, Application US/09289349; Patent No. 6277559; GENERAL INFORMATION:
 ORGANISM: Homo sapiens
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113

PRICR APPLICATION NUMBER: 60/08655
PRICR FILING DATE: 1998-06-09
PRICR FILING DATE: 1998-06-10
PRICR FILING DATE: 1998-06-10
PRICR FILING DATE: 1998-06-10
PRICR PLILING DATE: 1998-06-10
PRICR APPLICATION NUMBER: 60/08812
PRICR PLILING DATE: 1998-06-10
PRICR APPLICATION NUMBER: 60/08826
PRICR FILING DATE: 1998-06-10
PRICR APPLICATION NUMBER: 60/08826
PRICR FILING DATE: 1998-06-11
PRICR PLILING DATE: 1998-06-16
PRICR PLILING DATE: 1998-06-17
PRICR PLILING DATE: 1998-06-18
PRICR PLILING DATE: 1998-06-12
PRICR PLILING DATE: 1998-06-12
PRICR PRILING DATE: 1998-06-12
PRICR PLILING DATE: 1998-06-22
PRICR PLILING DATE: 1998-06-23
PRICR PLILING DATE: 1998-06-24
PRICR PLILING DATE: 1 TION: Secreted and Transmembrane Polypeptides and Nucleic RION: Acids Encoding the Same: P2730P1C13 ATION NUMBER: US/09/996,243 DATE: 2001-11-14 ION NUMBER: 60/049787 ATE: 1997-10-17 ION NUMBER: 60/065186 ATE: 1997-11-12 ION NUMBER: 60/065311 ATE: 1997-11-13 ION NUMBER: 60/066770 ATE: 1998-06-02 ION NUMBER: 60/087759 ATE: 1998-06-02 ION NUMBER: 60/087827 ATE: 1998-06-03 ATE: 1998-06-04 ION NUMBER: 60/088030 ATE: 1998-06-04 ATE: 1997-06-16 ION NUMBER: 60/062250 ATE: 1997-11-24 CON NUMBER: 60/075945 ATE: 1998-03-20 ION NUMBER: 60/083322 ATE: 1998-04-28 ION NUMBER: 60/084600 NTE: 1998-05-07 ON NUMBER: 60/087106 ATE: 1998-06-02 CON NUMBER: 60/087609 ATE: 1998-06-04 CON NUMBER: 60/088025 ATE: 1998-06-04 ION NUMBER: 60/088326 ATE: 1998-06-04 CON NUMBER: 60/088167 ATE: 1998-06-05 ATE: 1998-06-05 ION NUMBER: 60/088212 ATE: 1998-06-05 ION NUMBER: 60/088217 ON NUMBER: 60/078910 ON NUMBER: 60/087607 ON NUMBER: 60/088021 ON NUMBER: 60/088026 ON NUMBER: 60/088028 ON NUMBER: 60/088029 ON NUMBER: 60/088033 ION NUMBER: 60/088202 lowski, Paul J. imaldi, J. Christopher y, Margaret Ann awart, Timothy A. nas, Daniel tanabe, Colin K. lliams, P. Mickey od, William I. rritsen, Mary E. Idard, Audrey 1998-05-28 1998-06-04 1998-06-05 oni, Nicholas F. TE: 1998-02-25 998-06-04 998-06-04 rney, Austin L. javin, Ivar J. pier, Mary A. Zemin ı,James

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09:53:12 2004
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                                                                                                                                                                                                                              1 MEEITCAFILLLAGLPALEASDP-VDKDSPFYYDWESLQLGGLIFGGLLCIAGIAN
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                                                                                                                        60.0%; Score 276.5; DB 4; Length 88; 66.7%; Pred. No. 4.2e-28; ive 8; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5. Application US/08725531
Patent No. 5756310
CENERAL INFORMATION:
APPLICANT:
APPLICANT:
Goli, Surya K.
TITLE OF INVENTION: NOVEL HUMAN PHOSPHOLEMMAN-LIKE PROTEIN
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                               60 KCKYKSSQKQHSPVPEKAIPLITEGSATIC 89
                                                                                                                                                                                                                                                                                                       E: Incyte Pharmaceuticals, Inc. 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,531
FILING DATE: Filed Herewith
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PF-0128 US
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Best Local Similarity 66.73
Matches 60; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
LIBRARY: Genbank
CLONE: 951423
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CITY: Palo Alto
STATE: CA
COUNTRY: U.S.
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STRANDEDNESS: si:
    ; SEQ ID NO 58
; LENGTH: 88
; TYPE: PRT
; ORCANISM: MOUSE
US-09-724-864-58
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US-08-725-531-5
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150n, James G.

10N: Polynucleotides, polypeptides expressed

100: by the polynucleotides and methods for their use.

11000.1050u1

TION NUMBER: US/09/724,864

DATE: 2000-11-28

ON NUMBER: US. No. 6380362 60/171,678
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TE: 1998-06-24

NN NUMBER: 60/090535

TE: 1998-06-24

NN NUMBER: 60/090540

TE: 1998-06-24

NN NUMBER: 60/090557

TE: 1998-06-24

NN NUMBER: 60/09057

TE: 1998-06-25

NN NUMBER: 60/090696

TE: 1998-06-26

NN NUMBER: 60/090696

TE: 1998-06-26

NN NUMBER: 60/090696

TE: 1998-06-26

NN NUMBER: 60/091478

TE: 1998-06-26

NN NUMBER: 60/091478

TE: 1998-06-26

NN NUMBER: 60/091544

TE: 1998-06-26

NN NUMBER: 60/091544

TE: 1998-07-01

NN NUMBER: 60/091549

TE: 1998-07-02

NN NUMBER: 60/091978

TE: 1998-07-02

NN NUMBER: 60/091978

TE: 1998-07-07

NN NUMBER: 60/091978
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1 MERVTLA-LLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-083-661-5

Sequence 5, Application US/09083661

Patent No. 5955283

GENERAL INFORMATION:
APPLICANT: Bandman, Olga
APPLICANT: Goli, Surya K.
TITLE OF INVENTION: NOVEL HUMAN PHOSPHOLEMMAN-LIKE PROTEIN
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60 KCKYKSSQKQHSP~~VPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60 KCK---CRRNHTPSSLPEKVTPLITPGSAST 87
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
                                                                                                               ZIP: 34304

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskertel
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FRACEQU Version 1.5
CURBENT APPLICATION DATA:
APPLICATION NUMBER: US/09/213,392
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/083,661
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REPERENCE/DOCKET NUMBER: PF-0128 US
TELEPHONE: 415-885-0555
TELEPHONE: 415-885-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                 PF-0128 US
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MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/083,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 61.5%
Matches 56; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 87 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear

MOLECULE TYPE: peptide

IMMEDIATE SOURCE:

LIBRARY: GenBank

CLONE: 951423
US-09-213-392-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: si
                                                          Palo Alto
                                                                           ζ.
α.υ.
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                                                          CITY: Pa
STATE: CA
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
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STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ITCAFLLVLAGLPVLEANGP-VDKGSPFYYDWESLQLGGMIFGGLLCIAGIAMALSG 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7; Gaps
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Goli, Surya K.
ENTION: NOVEL HUMAN PHOSPHOLEMMAN-LIKE PROTEIN
QUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55.6%; Score 256.5; DB 2; Length 87.
larity 61.5%; Pred. No. 1.5e-25;
Conservative 11; Mismatches 17; Indels
                                                                                                                                                                                                 Bandman, olga
Hawkins, Phillip R.
ENTION: NOVEL HUMAN PHOSPHOLEMMAN HOMOLOG
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  KKSSQKQHSP--VPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                               QUENCES: 6
CE ADDRESS:
Incyte Pharmaceuticals, Inc.
174 Porter Drive
                         ---CRRNHTPSSLPEKVTPLITPGSAST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF-0141 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SYSTEM: DOS
FASISEQ Version 1.5
ICATION DATA:
N NUMBER: US/08/738,127
E: Filed Herewith
ATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lication US/09213392
                                                                                                                                           lication US/08738127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lings, Lucy J.
ON WMBER: 36,749
DOCKET NUMBER: PF-0
ATION INFORMATION:
415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  415-845-4166
R SEQ ID NO: 5:
RACTERISTICS:
7 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single
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                                                                                                                                                                                                                                                                                                                                                                                                                                 DABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenBank
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                                                                                                                                                                                  ATION:
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1 MERVILALLI-LAGLTALEANDPFANKDDPFYYDWKNLOLSGLICGGLLAIAGIA
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                                                                                                                                                                                                                     Query Match

46.5%; Score 214.5; DB 1; Length 87;
Best Local Similarity 54.5%; Pred. No. 3.8e-20;
Matches 48; Conservative 11; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4. Application US/08725531

Patent No. 5756310

GENERAL INFORMATION:

APPLICANT: Bandman, Olga

APPLICANT: Bandman, Olga

APPLICANT: Goli, Surya K.

TITLE OF INVENTION: NOVEL HUMAN PHOSPHOLEMMAN-LIKE PROTEIN

NUMBER OF SEQUENCES: 6

CORRESPONDENCES: ADDRESS:

ADDRESSES: Incyte Pharmaceuticals, Inc.

STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 46.5%; Score 214.5; DB 1; Length 87; Best Local Similarity 54.5%; Pred. No. 3.8e-20; Matches 48; Conservative 11; Mismatches 24; Indels
                                                                                                                                                              24; Indels
                                                                                                                                                                                                                                                                     60 KCKYKSSQKQ-HSPVPEKAIPLITPGSA 86
                                                                                                                                                                                                                                                                                                      60 KCKCKFGQKSGHH--PGETPPLITPGSA 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: DOS
SOFTWARE: FASUSEQ VERSION 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,531
FILING DATE: Filed Herewith
PRICR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PF-0128 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
ATTORNEY AGENT INFORMATION:
NAME: BAILINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-01
TELEPHONE: 415-855-0555
TELEPHONE: 415-845-4166
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANG.
TOPOLOGY: linear
MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
LIBRARY: GenBank
GTONE: 1085026
     SEQUENCE CHARACTERISTICS:
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                                    ; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-289-247B-4
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MEDIUM TYPE: Diskett
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STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                               7; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          55.6%; Score 256.5; DB 2; Length 87; larity 61.5%; Pred. No. 1.5e-25; Onservative 11; Mismatches 17; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KSSOKOHSP--VPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --CRRNHTPSSLPEKVTPLITPGSAST 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1: 3.5" Diskette, 1.44 Mb
IBM PS/2 Model 50Z or 55SX
NYSTEM: MS-DOS (Version 5.0)
WordPerfect (Version 5.1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ter-Brady, Kristina
NN NUMBER: 39,109
NOCKET NUMBER: 00383/021001
                                                                                                                         PF-0128 US
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3:
VIION DATA:
1 NUMBER: 08/725,531
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Clark & Elbing LLP
                                                                                 ings, Lucy J.
N NUMBER: 36,749
OCKET NUMBER: PF-0
VION INFORMATION:
415-855-0555
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                                                                                                                                                                         428-0200
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                                                                  IT INFORMATION:
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                                                                                                                                                                                                                                amino acids
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1 MERVILALLL-LAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIF
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US-09-083-661-4
; Sequence 4, Application US/09083661
; Patent No. 595283
GENERAL INFORMATION:
APPLICANT: Bandman, Olga
APPLICANT: Bandman, Olga
APPLICANT: Goli, Surya K.
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
46.5%; Score 214.5; DB 2; Length 87;
Best Local Similarity 54.5%; Pred. No. 3.8e-20;
Matches 48; Conservative 11; Mismatches 24; Indels
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/083,661
APTICANG DATE:
ATTORNEY AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0128 US
TELECOMONICATION INFORMATION:
TELEPHONE: 415-855-0555
THEEPRAN 415-845-4166
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                                                                                                                                                                                        SOFTWARE: FASTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/213,392
FILING DATE:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                        COUNTR: ..
ZIF: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
MEDIUM TYPE: Diskette
MEDIUM TYPE: Diskette
DOS
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
LIBRARY: GenBank
CLONE: 1085026
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                                                                       Palo Alto
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                                                                                        STATE: C. COUNTRY:
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Goli, Surya K.
ENTION: NOVEL HUMAN PHOSPHOLEMMAN-LIKE PROTEIN
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                                                                                                                                                                                                Bandman, Olga
Hawkins, Phillip R.
ENTION: NOVEL HUMAN PHOSPHOLEMMAN HOMOLOG
                                                                                                                                                                                                                                                                                           Incyte Pharmaceuticals, Inc. 174 Porter Drive
                                        CKFGQKSGHH--PGETPPLITPGSA 85
                   YKSSOKO-HSPVPEKAIPLITPGSA 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YKSSOKO-HSPVPEKAIPLITPGSA 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SYSTEM: DOS
FastSEQ Version 1.5
ICATION DATA:
N NUMBER: US/08/738,127
E: Filed Herewith
ATION DATA:
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                                                                                                                                              lication US/08738127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lings, Lucy J.
ON NUMBER: 36,749
DOCKET NUMBER: PP-0
ATION INFORMATION:
415-855-0555
415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                           IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NT INFORMATION:
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RACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                        Diskette
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URCE:
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                                                                                                                                                                                                                                                                           CE ADDRESS:
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85026
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linear

ATION:

no acid

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14 LTALEANDFFANKDDFFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKCKYKSSQK(
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 28.0%; Score 129; DB 4; Length 92; Best Local Similarity 41.3%; Pred. No. 4e-09; Matches 26; Conservative 15; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 120, Application US/09247155A
Fatent No. 6312922
Fagneral INCRMATION:
APPLICANT: Dunas Milne Edwards, Jean-Baptiste
APPLICANT: Dunas Milne Edwards, Jean-Baptiste
APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
TITLE OF THE BOUGUELER, Lydie
TITLE OF THE REFERENCE: GRNSET: 021A
CURRENT APPLICATION NUMBER: US/09/247,155A
CURRENT APPLICATION NUMBER: 60/074,121
EARLIER APPLICATION NUMBER: 60/074,121
EARLIER FILING DATE: 1998-02-09
FARLIER FILING DATE: 1998-04-13
EARLIER FILING DATE: 1998-10-04
NUMBER OF SEQ ID NOS: 182
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                      TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patent.pm
SEQ ID NO 120
LENGTH: 92
TYPE: PRT
ORGANISM: Homo sapiens
                                                                              MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
LIBRARY: PRCSNOT05
CLONE: 786812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , NAME/KEY: SIGNAL
; LOCATION: -20..-1
US-09-247-155-120
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73 PDE 75
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73 PDE 75
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                                                                                                                                          ; CLONE: 7
US-08-738-127-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46.5%; Score 214.5; DB 2; Length 87; arity 54.5%; Pred. No. 3.8e-20; onservative 11; Mismatches 24; Indels E
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awkins, Phillip R.
NTION: NOVEL HUMAN PHOSPHOLENMAN HOMOLOG
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N NUMBER: 36,749
OCKET NUMBER: PF-0141 US
FION INPORMATION:
415-855-0555
15-845-4166
SEQ ID NO: 1:
ACTERISTICS:
                                                                                                                                                        PF-0128 US
US/09/083,661
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Filed Herewith
                                                       08/725,531
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FastSEQ Version 1.5
CATION DATA:
                                                                                                               ings, Lucy J.
N WUBER: 36,749
OCKET NUMBER: PP-0
TION INPORMATION:
415-855-0555
15-845-4166
SEQ ID NO: 4:
ACTERISTICS:
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                                                                                               INFORMATION:
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S: single
linear
: peptide
RCE:
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                                   TION DATA:
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Goli, Surya K.
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QUENTION: NOVEL HUMAN PHOSPHOLEMMAN-LIKE PROTEIN
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. in search, using sw model nuary 6, 2004, 16:04:11; Search time 32 Seconds (without alignments) 558.033 Million cell updates/sec -10-063-557-50 MERVTLALLLLAGLTALEANHSPVPEKAIPLITPGSATTC 89 OSUM62 pop 10.0, Gapext 0.5 1937 seqs, 200641211 residues Ls satisfying chosen parameters: 733937 gth: 0 gth: 0 gth: 2000000000 inimum Match 0% aximum Match 0% isting first 45 summaries ublished Applications Ab.*	LISTING ABDITICATIONS AR:* // CGROZ 6/ptodata/1/pubpaa/USO7 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO7 NUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO6 NUBM PUB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO6 NUBM PUB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO7 NUBW PUB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO9 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO9 NUBW PUB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO9 NUBW PUB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:* // CGROZ 6/ptodata/1/pubpaa/USO8 NUBW PUB.pep:*	the number of results predicted by chance to have a richan or equal to the score of the result being printed, ad by analysis of the total score distribution. SUMMARIES SUMMARIES SUMMARIES SCHOOL BY ON SOURCE SERVICE SEQUENCE 262, APP SEQUENCE

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	tion US/09989;067A1 'Avi J. 'Avi J. 'David 's, Luc In L. In Mary E. 'Paul J. 'Audrey 'Paul J. 'Audrey 'David 'Audrey 'Paul J. 'Audrey 'Paul J. 'Audrey 'Paul J.
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TOWN WINNERS: 60/08518

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PRIOR FILING DATE: 1998-06-16
PRIOR APPLICATION UNMERS: 60/089512
PRIOR APPLICATION NUMBER: 60/089513
PRIOR APPLICATION NUMBER: 60/089518
PRIOR PLILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/08969
PRIOR APPLICATION NUMBER: 60/08969
PRIOR PLILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/08908
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R FILING DATE: 1998-02-25
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R APPLICATION NUMBER: 60/08910
R FILING DATE: 1998-04-28
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liams, P. Mickey
i, William I.
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avin, Ivar J.
ier, Mary A.
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ritsen, Mary E.
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enazi, Avi J. er, Kevin P. stein, David

noyers, Luc on, Dan L. g, Sherman dard, Audrey

wart, 11. Daniel

James

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DATE: 1998-06-18
FION NUMBER: 60/089908
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Number of Invention: Secreted and Transmembrane Polypeptides and Number of Invention: Acids Encoding the Same File Reference: P2730P1C56
CURRENT APPLICATION NUMBER: US/09/989,279
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR APPLICATION NUMBER: 60/065166
PRIOR APPLICATION NUMBER: 60/065186
PRIOR APPLICATION NUMBER: 60/065186
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-12
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PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091544
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PRIOR APPLICATION NUMBER: 60/091519
PRIOR PILING DATE: 1998-07-02
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PRIOR APPLICATION NUMBER: 60/091633
PRIOR PILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/091978
PRIOR FILING DATE: 1998-07-07
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; Patent No. US20020072496Al
; GENERAL INFORMATION:
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Gurney, Austin L.
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Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
Watanabe, Colin K.
Williams, P. Wickey
Wood, William I.
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Ferrara, Napoleone
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APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
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Napier, Mary A.
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PRIOR FILING DATE: 1998-06-17
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DR APPLICATION NUMBER: 60/084600

DR FILING DATE: 1998-04-28

FILING DATE: 1998-05-07

DR APPLICATION NUMBER: 60/087106

DR FILING DATE: 1998-05-28

R FILING DATE: 1998-06-02

DR APPLICATION NUMBER: 60/087609

DR FILING DATE: 1998-06-02

DR APPLICATION NUMBER: 60/087759

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R APPLICATION NUMBER: 60/086029

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R APPLICATION NUMBER: 60/08833

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R APPLICATION NUMBER: 60/088167

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R APPLICATION NUMBER: 60/088212

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R APPLICATION NUMBER: 60/088655

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R APPLICATION NUMBER: 60/08858

R FILING DATE: 1998-06-11

R APPLICATION NUMBER: 60/08861

R FILING DATE: 1998-06-11

R APPLICATION NUMBER: 60/088976

R FILING DATE: 1998-06-11

R APPLICATION NUMBER: 60/0899105

R FILING DATE: 1998-06-11

R APPLICATION NUMBER: 60/089105

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FILING DATE: 1998-06-04
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APPLICATION NUMBER: 60/089514
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APPLICATION NUMBER: 60/089538
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JATE: 1998-07-02
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FION NUMBER: 60/092182
NATE: 1998-07-09
TION NUMBER: 60/091519
DATE: 1998-07-02
IION NUMBER: 60/091626
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ION NUMBER: 60/049787
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ION NUMBER: 60/065186
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ATE: 1997-11-24
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ION NUMBER: 60/078910
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odowski, Paul J.
imaldi, J.Christopher
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tanabe, Colin K.
lliams, P. Mickey
od, William I.
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y, Margaret Ann
ewart, Timothy A.
mas, Daniel
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tton, Dan L.
rrara, Napoleone
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rritsen, Mary E.
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ker, Kevin P.
tstein, David
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.pier, Mary A.
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APPLICANT: Zhang, Zemin TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and NucTITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2730PLC70
CURRENT APPLICATION NUMBER: US/09/989,731
CURRENT FILING DAIE: 2001-11-20
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100.0%; Pred. No. 5.8e-48;
live 0; Mismatches 0;
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PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091633
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PRIOR APPLICATION NUMBER: 60/091978
PRIOR FILING DATE: 1998-07-07
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PRIOR APPLICATION NUMBER: 60/09182
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PRIOR APPLICATION NUMBER: 60/06226
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PRIOR APPLICATION NUMBER: 60/065186
PRIOR PELING DATE: 1997-10-12
PRIOR PELING DATE: 1997-11-13
PRIOR PELING DATE: 1997-11-13
PRIOR PELING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/065710
PRIOR APPLICATION NUMBER: 60/075945
PRIOR PELING DATE: 1998-02-25
PRIOR FILING DATE: 1998-03-26
PRIOR FLING DATE: 1998-03-26
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PRIOR FLING DATE: 1998-03-26
PRIOR FLING DATE: 1998-04-28
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Patent No. US20020103125A1
GENERAL INFORMATION:
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PRIOR APPLICATION NUMBER: 60/049787
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Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
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Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
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Ferrara, Napoleone
Fong, Sherman
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Gerritsen, Mary E.
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Best Local Similarity 100.
Matches 89; Conservative
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Botstein, David
Desnoyers, Luc
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PRIOR FILING DATE: 1998-05-28

PRIOR APPLICATION NUMBER: 60/087609

PRIOR FILING DATE: 1998-06-02

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APPLICATION NUMBER: 60/089600
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APPLICATION NUMBER: 60/089599
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ION NUMBER: 60/091982

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anabe, Colin K.
liams, P. Mickey
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wart, Timothy A.
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ATE: 1998-06-18
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Ni TITLE OF INVENTION: Acids Encoding the Same FILE REFERCEZ : P270-PICLS
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PRIOR FILING DATE: 1998-07-07
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Kljavin,Ivar J.
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Watanabe, Colin K.
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TION: Secreted and Transmembrane Polypeptides and Nucleic
TION: Acids Encoding the Same
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100.0%; Score 461; DB 10; Length 89;
larity 100.0%; Pred. No. 5.8e-48;
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PRIOR PLING DATE: 1998-06-10
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	APPLICANT:	T: Botstein, David T: Desnovers Inc
	, APPLICANT	T: Eaton, Dan L.
	; APPLICANT	
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	APPLICANT	1: Gerricsen, mary E. T: Goddard Andrev
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	; APPLICAN	T: Grimaldi,J.Christopher
	; APPLICAN	T: Gurney, Austin L.
	, APPLICANT:	Napier, Mary A
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	; APPLICAN	Paoni, Nicholas
	APPLICAN	Roy, Margaret Ann
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	, APPLICAN	Watan
	; APPLICAN	
	, APPLICAN	Wood,
	, APPLICANT:	Zhang, Zemin
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PRIOR FILING DATE: 1998-06-19

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PRIOR PILING DATE: 1998-06-04

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PRIOR APPLICATION NUMBER: 60/088024

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PRIOR PELICATION NUMBER: 60/089600
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PRIOR FILING DATE: 1998-06-19
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and NuTITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2730P1C22
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CURRENT PILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: 06/049787
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PRIOR FILING DATE: 1997-00-17
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PRIOR FILING DATE: 1998-06-04
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      61 CKYKSSQKQHSPVPEKAIPLITPGSATTC 89
                                  61 CKYKSSQKQHSPVPEKAIPLITPGSATTC 89
                                                                                                                                                            ; Sequence 262, Application US/09990456; Patent No. US20020137890A1; GENERAL INFORMATION: APPLICANT: Askensi, Ay J. APPLICANT: Baker, Kevin P. APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Grimaldi, J. Christopher
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Kljavin, Ivar J.
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| PRIOR FILING DATE: 1999-66-23
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| PRIOR FILING APELICATION WINDERS: 66/190345
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| PRIOR FILING DATE: 1999-66-23
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| PRIOR FILING APELICATION WINDERS: 66/190355
| PRIOR FILING DATE: 1999-66-24
| PRIOR PRIOR APPLICATION WINDER: 60/090542
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R FILING DATE: 1998-06-04

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R FILING DATE: 1998-06-05

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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nur
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C20
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CURRENT PEDLICATION NUMBER: US/992,598
CURRENT FILING DATE: 2001-11-14
PRIOR PULICATION NUMBER: 06/049787
PRIOR PLING DATE: 1997-06-16
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PRIOR PELING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088025
PRIOR PELING DATE: 1998-06-04
                                          Sequence 262, Application US/09992598 Patent No. US20020160384A1 GENERAL INFORMATION: APPLICANT: Ashkenazi, Avi J.
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Grimaldi, J.Christopher
Gurney, Austin L.
Kljavin, Ivar J.
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FILING DATE: 1998-06-04
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Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
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Williams, P. Mickey
Wood, William I.
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Gerber, Hanspeter
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                                                                                                                                                                Botstein, David
                                                                                                                                            Baker, Kevin P.
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Eaton, Dan L.
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DATE: 1998-06-05 TION NUMBER: 60/08873 DATE: 1998-06-10 TION NUMBER: 60/088742 DATE: 1998-06-10 TION NUMBER: 60/088810 DATE: 1998-06-10 TION NUMBER: 60/088824 DATE: 1998-06-10 7ATE: 1998-06-10 FION NUMBER: 60/088858 ATE: 1998-06-11 FION NUMBER: 60/08861 ATE: 1998-06-11 ION NUMBER: 60/08876 ATE: 1998-06-11 ION NUMBER: 60/089105 ATE: 1998-06-12 ION NUMBER: 60/089105 ATE: 1998-06-12 ATE: 1998-06-16
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R APPLICATION NUMBER: 60/091978

R FILING DATE: 1998-07-07

R APPLICATION NUMBER: 60/091982

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TON: Secreted and Transmembrane Polypeptides and Nucleic
TON: Acids Encoding the Same
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ON NUMBER: 60/088033
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maldi, J. Christopher
ney, Austin L.
avin, Ivar J.
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, Margaret Ann
wart, Timothy A.
tas, Daniel
anabe, Colin K.
liams, P. Mickey
od, William I.
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fritsen, Mary E.
Idard, Audrey
                                                                                                          frara, Napoleone
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sstein, David
inoyers, Luc
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Grimaldi, J. Christopher

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Gurney, Austin L. Godowski, Paul J. Kljavin, Ivar J. Napier, Mary A.

Ferrara, Napoleone

Fong, Sherman

Gerber, Hanspeter Gerritsen, Mary E.

Goddard, Audrey

Stewart, Timothy A. Tumas, Daniel Watanabe, Colin K. Williams, P. Mickey Wood, William I.

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Roy, Margaret Ann

Pan, James Paoni, Nicholas F.

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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nr. TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nr. TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nr. TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nr. TITLE OF INVENTION: Acids Encoding the Same FILE STATE STATE TO STATE TO

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Best Local Similarity 100.0%; Pred. No. 5.8e-48;
Matches 89; Conservative 0; Mismatches 0;
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PRIOR APPLICATION NUMBER: 60/091360
PRIOR APPLICATION NUMBER: 60/091476
PRIOR APPLICATION NUMBER: 60/091544
PRIOR FILING DATE: 1998-07-01
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PRIOR PELLING DATE: 1998-07-02
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PRIOR FILING DATE: 1998-07-07
                         NR FILING DATE: 1998-06-24

NR APPLICATION NUMBER: 60/090445

NR FILING DATE: 1998-06-24

NR APPLICATION NUMBER: 60/090472

NR FILING DATE: 1998-06-24

NR PILING DATE: 1998-06-24

NR PILING DATE: 1998-06-24

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R FILING DATE: 1998-06-25
R APPLICATION NUMBER: 60/090696
R FILING DATE: 1998-06-25
R FILING DATE: 1998-06-26
R FILING DATE: 1998-06-26
R APPLICATION NUMBER: 60/090863
APPLICATION NUMBER: 60/090444
FILING DATE: 1998-06-24
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FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090695
FILING DATE: 1998-06-25
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APPLICATION NUMBER: 60/091360
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FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090694
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Search completed: January 6, 2004, 16:09:44 Job time : 32 secs

61 CKYKSSOKOHSPVPEKAIPLITPGSATTC

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CAMP-dependent pro Na+/K--exchanging Na+/K--exchanging Na+/K--exchanging Na+/K--exchanging Na+/K--exchanging pastoquinol-plast conserved hypothet probable membrane hypothetical prote chorismate synthas potassium channel probable transport probable transport potassium channel potassium channel mammary tumor prot chloride conductan potassium channel proline/betaine tr transmembrane prot nuary 6, 2004, 16:01:30 ; Search time 21 Seconds
(without alignments)
407.572 Million cell updates/sec the number of results predicted by chance to have a cthan or equal to the score of the result being printed, ad by analysis of the total score distribution. 89 Description MERVTLALLLLAGLTALEAN.......HSPVPEKAIPLITPGSATTC 283308 GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. ss satisfying chosen parameters: 3308 seqs, 96168682 residues SUMMARIES in search, using sw model inimum Match 0% aximum Match 100% isting first 45 summaries OSUM62 pop 10.0 , Gapext 0.5 159391 561552 A55571 A40533 D46435 A46435 C46435 A61088 A43531 AC1697 AI1325 A46020 AH0371 A05009 A72004 B86620 A38101 B90463 # 3th: 0
20000000000 -10-063-557-50 Length DB IR_76:* pir1:* pir2:* pir3:*

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30 62 13.4 393 2 B97682 uracil trani 32 62 13.4 589 2 T41295 uracil trani 33 61.5 13.3 34.2 875086 fixon-stress 34 61.5 13.3 433 2 H86597 fixon-stress 35 61.5 13.3 433 2 B72025 virulence 7 36 61.5 13.3 433 2 A81513 virulence 7 37 61.5 13.3 449 2 AC2555 conserved 7 41 61 13.2 268 2 C87295 conserved 7 42 61 13.2 463 2 B90084 damage-ind. 44 61 13.2 463 2 B8829 Oartigen 9 44 61 13.2 520 2 B94471 probable me	RESULT 1 153391 C.Species: Rattus norvegicus (Norway rat) C.Species: Rattus norvegicus (Norway rat) C.Species: Rattus norvegicus (Norway rat) C.Bate: 02-011-1996 #sequence_revision 02-011-1996 #text_change 05-Nov C.Accession: 159391 R.Attali, B.; Latter, H.; Rachamim, N.; Garty, H. Proc. Natl. Acad. Sci. U.S.A. 92, 6092-6096, 1995 A.Title: A corticosteroid-induced gene expressing an 'IsK-like' K+ cha A; Recession: 159391; MUID:93320221; PMID:7597086 A;Accession: 159391 A;Nolecule type: mRNA A;Residues: 1-87 eRES> A;Cross-references: GB:L41254; NID:9951422; PIDN:AAA74691.1; PID:g9514 A;Gene: 3D CRIF	Query Match 55.6%; Score 256.5; DB 2; Length 87; Best Local Similarity 61.5%; Pred. No. 2.8e-21; Matches 56; Conservative 11; Mismatches 17; Indels 7; G QY 1 MERYLIA-LLILAGLTALEANDPFANKDDFFYYDWKNLQLSGLICGGLIAIAGIAA	RESULT 2 SG1552 mammary tumor protein mat8 precursor - mouse C;Species. Mus masculus (house mouse) C;Species. Mus masculus (house mouse) C;Accession: SG152; 148648 R;Morrison, B.W.; Leder, P. Oncogene 9, 3417-3426, 1994 A;Title: neu and ras initiate murine mammary tumors that share genetic A;Reference number: 148271; MUID:95060797; PMID:7970700 A;Reference number: 148271; MUID:95060797; PMID:7970700 A;Reference number: 1-8871; MUID:95060797; PMID:7970700 A;Residues: 1-88 < MOR> A;Cross-references: EMBL:X93038; NID:g1085067; PIDN:CAA63606.1; PID:g1(C;Genetics: mat8 F;1-20/Domain: signal sequence #status predicted <nat> F;21-88/Product: mammary tumor protein mat8 #status predicted <mat></mat></nat>
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DB 2; Length 88;

52.4%; Score 241.5;

Query Match

Shaw type potassiu leucine-tRNA ligas GGDEF family prote

hypothetical prote hypothetical prote transcription regu potassium channel

A70525 C96818

585 620 468 2299 679 769 910

S07095 A39395 A42073 I56546 F81974 AB2907

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A; Accession: S31524
A; Molecule type: mRNA
A; Molecule type: BBB: 3.2015.3 (MEW)
A; Molecule type: BBB: 3.2015.3 (MEW)
A; Cross-references: EMBL: 3.70061; MID: 91255; PIDN: CAA49665.1; PID: 9125
B; Collins, J.H.; Leszyk, J.
B; Collins, J.H.; Leszyk, J.
A; Title: The "gamma-subunit" of Na, K-ATPase: a small, amphiphilic pro A; Reference number: A27383; MUID: 88163544; PMID: 2831947
A; Accession: A27383
A; Molecule type: protein
A; Residues: 1-19; F', 21-33 cCL.>
C; Complex: heterotrimer; alpha, beta, and gamma chain
C; Keywords: heterotrimer; hydrolase; transmembrane protein
        Na+/K+-exchanging ATPase (EC 3.6.3.9) gamma chain - bovine C; Species: Bos primigenius taurus (cattle) C;Date: Bos primigenius taurus (cattle) C;Date: 31-Boc-1993 #sequence_revision 03-Feb-1994 #text_change 19-A; C;Accession: D46455; S315.58 (C;Accession: D46455; S315.58 (C;Accession: D46455; S315.58 (C;Accession: D.P.; Collins, J.H.; For J. Cell Biol. 121, 579-586, 1993 A;Title: Molecular cloning and immunological characterization of the A;Reference number: A46435; MuID:93252993; PMID:8387529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Na+/K+-exchanging ATPase (EC 3.6.3.9) gamma chain - sheep (fragment)
NyAlternate names: sodium pump gamma chain; sodium/potassium-depender
C;Species: Ovis orientalis arises, Ovis ammon arises (domestic sheep)
C;Date: 22-Nov-1993 #sequence revision 05-Dec-1998 #text_change 19-Ag
C;Accession: A46435; S31524; A27383
R;Mercer, R; B; B; B; B; B; B; B; B; C; D; Collins, J; F; For
J; Cell Biol. 121, 579-586, 1993
A;Title: Molecular cloning and immunological characterization of the
A;Reference number: A46435; MUID:93252993; PMID:8387529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Experimental source: kidney
A;Note: sequence inconsistent with the nucleotide translation
A;Note: sequence extracted from NCBI backbone (NCBIN:131232, NCBIP:13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27 DDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKCKYKSSQKQHSPVPEKAI 78
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                                                                                                                                                                                                                                                           A,Status: preliminary
A;Molecule type: mRNA
A;Rosidues: 1-58 wmER>
A;Cross-references: EMBL:X70059; NID:g396; PIDN:CAA49663.1; PID:g397
A;Note: the authors translated the codon TTC for residue 25 as Pro
C;Keywords: hydrolase; transmembrane protein
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Submitted to the EMBL Data Library, December 1992
Submitted to the EMBL pata Library, December 1992
A.Pescription: Cloning and sequencing of gamma subunit of A.Reference number: S31522
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B46435
Na+/K+-exchanging ATPase (EC 3.6.3.9) gamma chain - rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.9%; Score 96.5; DB 2; 34.6%; Pred. No. 0.00093; iive 14; Mismatches 19;
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Best Local Similarity 34.6%
Matches 18; Conservative
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Best Local Similarity
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A;Molecule type: mRNA
A;Residues: 6-53 <MER>
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Matches
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tion and complete sequence determination of the major plasma membrane
r: A40533; MUID:91250422; PMID:1710217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              s: GB:X93036; GB:S74645; NID:g1085025; PIDN:CAA63604<sup>2</sup>1; PID:e211793; membrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moorman, J.R.; Kowdley, G.C.; Kobayashi, Y.M.; Jones, L.R.; Leder, 10, 2176-2182, 1995.

"In novel phospholemman-like protein expressed in human breast tumors, 1: A55571; MUID:95138184; PMID:7836447
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                                                                                VTLALL-LLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSG 59
                                                                                                                   VTLALLL-LAGITALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSG 59
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                                                                                                                                                                                                                                                                                                                                                                                                                                              95 #sequence_revision 23-Mar-1995 #text_change 28-May-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              otein kinase major membrane substrate precursor - dog
lupus familiaris (dog)
92 #sequence_revision 28-Feb-1992 #text_change 05-May-1993
                                        Gaps
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  Pred. No. 1.3e-19;
1; Mismatches 24; Indels
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41.4%; Pred. No. 7.3e-07;
live 15; Mismatches 23;
                                                                                                                                                                                                                                    CKFRQKP-SHRPGEGPPLITPGSAHNC 88
                                                                                                                                                                                           CYKSSQKQHSPVPEKAIPLITPGSATTC 89
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                               11;
57.8%;
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Length 160;

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probable membrane protein YPO3057 [imported] - Yersinia pestis (strain C;Species: Yersinia pestis

98

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chorismate synthase [imported] - Chlamydophila pneumoniae (strain J13 C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 23-Ma
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A,Molecule type: DNA
A,Residues: 1-359 <STO>
A,Cross-references: GB:BA000008; NID:g8979410; PIDN:BAA99244.1; GSPDE
A,Experimental source: strain J138
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Accession: B86620
R; Shirai, M.; Hirakawa, H.; Kimoto, M.; Tabuchi, M.; Kishi, F.; Ouchi
Nucleic Acids Res. 28, 2311-2314, 2000
A;Title: Comparison of whole genome sequences of chlamydia pneumoniae
A;Reference number: A86491; MUID:20330349; PMID:10871362
                                                                                                                                                             Ajexperimental source: strain CWL029
R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.;
C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McC.
Nucleic Acids Res. 28, 1397-1406, 2000
A;Fitle: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia
A;Reference number: A81500; MUID:20150255; PMID:10684935
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N;Alternate names: potassium channel HLK3; potassium channel PCN3; sh
C;Species: Homo sapiens (man)
                                                                                                                                   A; Cross-references: GB: AE001684; GB: AE001363; NID: 94377366; PIDN: AAD
                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:AE002240; GB:AE002161; NID:g7189720; PIDN:AAF:
A;Experimental source: strain AR39, HL cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234 ALMSIPAAKGFEIGKGFASAQMRGSQYTDPFVMEGENITLKSNNCGGTLGGIIIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 ALLLLAGLTALEANDPFANKD-----DPFYYDWKNLQLSGLICGGLLAIAGI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             234 ALMSIPAAKGFEIGKGFASAQMRGSQYTDPFVMEGENITLKSNNCGGTLGGITIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              294 RIAFKPTSIKRPCATVTKTKKETTYRTPQTGRHDPCVAIRAVPVV 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        294 RIAPKPTŚIKRPCATVTKTKKETTYRTPQTGRHDPCVAIRAVPVV 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14.4%; Score 66.5; DB 2; Length 35:
23.6%; Pred. No. 13;
:ive 14; Mismatches 36; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---QHSP-VPEKAIPLI
  A; Reference number: A72000; MUID: 99206606; PMID: 10192388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14.4%; Score 66.5; DB 2; 23.6%; Pred. No. 13; iive 14; Mismatches 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Superfamily: chorismate synthase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Superfamily: chorismate synthase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60 KCKYK--SSQK-----
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Best Local Similarity 23.0.
Local Similarity 23.0.
Local Similarity 25.0.
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                                                     A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-359 <ARN>
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es 25; Conserv
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                                                                                                                                                                                                                                                                                                                             A, Accession: D81536
A, Status: preliminary
A, Molecule type: DNA
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                                 A; Accession: A72004
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                                                                                                                                                                                                                                                                                                                                                                                                              A; Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Gene: aroC
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A38101
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                                               /ren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B.
i.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.;
d, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell,
i27, 2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , 299-331, 1988
e and organization of Marchantia polymorpha chloroplast genome. II. Gen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             s: EMBL:X04465; NID:g11640; PIDN:CAA28060.1; PID:g453590
uzawa, H.; Kohchi, T.; Shirai, H.; Sano, T.; Sano, S.; Umesono, K.; Shi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      se CP0815 [imported] - Chlamydophila pneumoniae (strains CWL029 and AR3 dophila pneumoniae, Chlamydia pneumoniae) # #sequence_revision 23-Apr-1999 #text_change 11-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organization deduced from complete sequence of liverwort March
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ive genomes of Clamydia pneumoniae and C. trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Z.; Fukuzawa, H.; Kohchi,
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                                                                                                                                                                                                                                                                                                               s: GB:AL590842; PIDN:CAC92299.1; PID:g15981010; GSPDB:GN00175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGI-AAVLSGKCK 62
#sequence_revision 02-Nov-2001 #text_change 09-Nov-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     plast Marchantia polymorpha
87 #sequence_revision 05-Jun-1987 #text_change 08-Oct-1999
71; A05009
                                                                                                                                                    sequence of Yersinia pestis, the causative agent of plague. ir: AB0001; MUID:21470413; PMID:11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32; Indels 14; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2; Length 150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    okuchi, H.; Shiki, Y.; Takeuchi, M.; Chang,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AG--LTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Pred. No. 2.8;
14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                     15.0%; Score 69; 30.2%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SQKQHSPVPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEVLHSFVOWKSILALVVGVAVS 98
                                                                                                                                                                                                                                                                                                                                                                                                pothetical protein ytwI
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: GB.M85217; NID:9186664; PIDN:AAA59457.1; PID:9186665
Hice, R.E.; Schaefer, K.; LaMendola, J.; Bell, G.I.; Nelson, D.J.; St
Sci. U.S.A. 88, 53-57, 1991
and functional expression in Xenopus oocytes of a human insulinoma and
s. A38556; WUID:91095456; PMID:1986382
4 #sequence_revision 07-Apr-1994 #text_change 01-Dec-2000
1; B38556; <u>T52990</u>
3; G.; Honore, E.; Schmid-Alliana, A.; Mattei, M.G.; Lesage, F.; Ricar 850-8657, 1992
functional expression, and regulation of two K(+) channels in human T and a salul; MuID:92235098; PMID:1373731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-1p13.3
assium channel protein drkl
rotein; phosphoprotein; potassium channel; transmembrane protein; volt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ization and functional expression of genomic DNA encoding the human ly 152990; MUID:92189730; PMID:1547020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ',21-36,'V',38-60,'L',62-90,'V',92-337,'S',339-418,'S',420-457,'LS',4
GB:MS5515
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L',62-523 <RES>
: GB:M38217; NID:G186670; PIDN:AAB88073.1; PID:G186671
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ne, P.B.; North, R.A.; Dooley, D.C.; Douglass, J. 163-172, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2; Length 523;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14.4%; Score 66.5; DB 2; Length 52 20.1%; Pred. No. 19; tive 14; Mismatches 36; Indels
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January 6, 2004, 16:04:40

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5.1.6 Compugen Ltd.		; Search time 11 Seconds (without alignments) 380.489 Million cell updates/sec		HSPVPEKAIPLITPGSATTC 89			127863				by chance to have a he result being printed, distribution.
GenCore version 5.1.6 Opyright (c) 1993 - 2004 Compug	n search, using sw model.	<pre>uary 6, 2004, 16:00:10; Search (without 380.489.</pre>	10-063-557-50	ERVTLALLLLAGLTALEANHSP	SUM62 op 10.0 , Gapext 0.5	.863 seqs, 47026705 residues	s satisfying chosen parameters:	rth: 0 rth: 200000000	nimum Match 0% .ximum Match 100% .sting first 45 summaries	issProt_41:*	the number of results predicted by chance to have a than or equal to the score of the result being printed, d by analysis of the total score distribution.

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SUMMARIES

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Н	Н	Н	Н	Н	Н	Н	Н	Н	ч	Н	7
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13.8	13.8	13.8	13.6	13.6	13.6	13.6	13.4	13.3	13.3	13.1	13.1
63.5	63.5	63.5	62.5	62.5	62.5	62.5	62	61.5	61.5	60.5	60.5
4	35	36	3.7	38	39	40	41	12	13	14	5

ALIGNMENTS

SULT 1 PXA FRU 15-15-15-15-15-15-15-15-15-15-15-15-15-1	or send a cor send a Genew; HG Genew; HG PROSITE; TYANSMEM DOWAIN TRANSMEM DOWAIN SEQUENCE SE	Oy 1 MERVTLALLIAGLTALEANDPFANKODPFYYDWKNIOLSGIICGGLLAIAGTAAVI
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Query Match
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                                                                                                                                                                                                                                                                                         ROT entry is copyright. It is produced through a collaboration Swiss Institute of Bioinformatics and the EMBL outstation-Bioinformatics Institute. There are no restrictions on its profit institutions as long as its content is in no way this statement is not removed. Usage by and for commercial unires allicense agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                M. A. Shibata K., Yoshino M., Itoh M., Ishii Y., Inagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Zawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., azaki Y., Gojobori T., Bono H., Ksukawa T., Saito R., atsuda H.A., Ashburner M., Batalov S., Kochiwa H., W., Gaasterland T., Gissi C., King B., Kochiwa H., W., Gaasterland T., Gissi C., Ring B., Kochiwa H., Wis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J., Staubli F., Suzuki R., Tomita M., Mapner L., Rashio T., ido T., Furuno M., Aono H., Baldarelli R., Barsh G., ido T., Fletcher C., Fuljita M., Gariboldi M., J., Hill D., Bojunga N., Carninci P., de Bonaldo M.F., J., Bult C., Fletcher C., Fuljita M., Gariboldi M., Hume D.A., Kamiya M., Lee N.H., Kchionni L., Mashima J., Mazzarelli J., Mombaerts P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., ato V., Schoenbach C., Seya T., Shibata Y., Storch K.-F., oyo-oka K., Wang K.H., Weltz C., Whittaker C., Wilming L., S., X., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                        (Rel. 41, Last annotation update)
containing ion transport regulator 4 precursor (Channel tor) (CHIF).
                                                                                                                                                                                                                                                  etazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
theria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          annotation of a full-length mouse cDNA collection.";
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390(2001).
Belongs to the FXYD family.
                                                                                                                                                                                                                                                                                                                                                                                       to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   channel; Ion transport.
                                                                                                     88 AA.
                                                                                                                                                    Rel. 41, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                        uence of mouse CHIF (FXYD4).";
KSSQKQHSPVPEKAIPLITPGSATTC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mail to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R000272; ATPIGL PLM MATB.
                                                                                                                                   41, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29; AAK51508.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Signal; Ionic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MM.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1310; FXYD; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38
59
88
9269 1
                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88
                                                                                                                                                                                                                                                                                                                                                                                       AR-2001)
                                                                                                                                                                                                                                    (Mouse)
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-:- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
-:- TISSUE SPECIFICITY: Selectively present in the distal parts nephron (medhulary and papillary collecting ducts and end poof cortical collecting tubule) and in the epithelial cells of stal colon. No expression is found in renal proximal tubul loop of henle and distal tubule, proximal colon, small incellung, choroid plexus, salivary glands, or brain.
-:- INDUCTION: By corticosteroids.
-:- SIMILARITY: Belongs to the FXXD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Re
NCBL_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a colbetween the Swiss Institute of Bioinformatics and the EMBL outhe European Bioinformatics Institute. There are no restrictionsely non-profit institutions as long as its content is modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.ch or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-1998 (Rel. 36, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotration update)
FXYD domain-containing ion transport regulator 4 precursor (Charinducing factor) (CHIF) (Corticosteroid-induced protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=95320221; PibMed=7597086; Attali B., Latter H., Rachamim N., Garty H.; "A corticosteroid-induced gene expressing an 'IsK-like' K+ chang activity in Xenopus cocytes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Cellular localization and regulation of CHIF in kidney and colc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FXYD DOMAIN-CONTAINING ION TRANSPOR
                                                                                                                                                              1 MERVILA-LLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGI
                                                                                                                                                                                                          1 MEEITCAFLLLLAGLPALEASDP-VDKDSPFYYDWESLQLGGLIFGGLLCIAGI?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- FUNCTION: Induces a potassium channel when expressed in xenc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE SPECIFICITY.
MEDLINE-97000648; PubMed-8843704;
Capurro C., Coutry N., Bonvalet J.-P., Escoubet B., Garty H.,
                            DB 1; Length 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PĒGN, PF02038, ATPIĞI PLM MĀT8; 1.
PROSITE; PS01310; FXYD; 1.
Transmembrane; Signal; Ionic channel; Ion transport.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 92:6092-6096(1995).
Score 276.5; DB 1/2 No. 1.7e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87 AA.
                                                             Pred. No. 1.7e
8; Mismatches
                                                                                                                                                                                                                                                                                                 60 KCKYKSSQKQHSPVPEKAIPLITPGSATTC 89
                                                                                                                                                                                                                                                                                                                                        60 KCKCRRTHKP-SSLPGKATPLIIPGSANTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; 141254; AAA74691.1; -.
PIR; 159391; 159391.
InterPro; IPR030272; ATP1G1_PLM_MATB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Am. J. Physiol. 271:C753-C762(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last seq
28-PEB-2003 (Rel. 41, Last ann
                         66.0%;
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SEQUENCE FROM N.A.
TISSUB=Colon;
                                                                                          60; Conservative
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                                              Best Local Similarity
Matches 60; Conserv
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when expressed in xenopus oocytes. May be a modulator capable
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39
60
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DOMAIN
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Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Collins F.S., Wagner L., Schemmen C.M., Schuler G.D.,
Ceeberg B., Buetow K.H., Schemmen C.M., Enter B.R.,
Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Saares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
T., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Judlano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Swan P.J., McKernan K.J., Mark J.A., Gibbs R.A.,
Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
John B., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
adan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Grimwood J., Schmutz J., Myers R.M.,
S.N., Kzzywinski M.I., Skalska U., Smailus D.E.,
Initial analysis of more than 15,000 full-length
se CDNA sequences ";
cad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                      TLA-LLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSG 59
                                                                                                                                                     TCAFLLVLAGLPVLEANGP-VDKGSPFYYDWESLOLGGMIFGGLLCIAGIAMALSG 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184; PubMed=7836447;
, Moorman J.R., Kowdley G.C., Kobayashi Y.M., Jones L.R.,
                                                                                           7; Gaps
                                                                                                                                                                                                                                                                                                                                                   Rel. 42, Last annotation update)
ontaining ion transport regulator 3 precursor (Chloride
nducer protein Mat-8) (Mammary tumor 8 kDa protein)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phospholemman-like protein expressed in human breast
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                                                                                                                                                                                                                                                                                                                                                                                                                                               cazoa, Chordata, Craniata, Vertebrata, Euteleostomi, neria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  initiate murine mammary tumors that share genetic ally absent in c-myc and int-2-initiated tumors."; 17-3426(1994).
                                                            DB 1; Length 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   s a chloride conductance in Xenopus occytes."; 270:2176-2182(1995).
                                                                                         17; Indels
            CYTOPLASMIC (POTENTIAL).
SDODEIFFC6B1BCCA CRC64;
                                                           ; Score 256.5; DB 1
; Pred. No. 2.2e-20;
11; Mismatches 17
                                                                                                                                                                                                     --CRRNHIPSSLPEKVIPLITPGSAST 87
                                                                                                                                                                                   KSSQKQHSP--VPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                                                             88 AA
                                                                                                                                                                                                                                                                                                                                        Last sequence update)
POTENTIAL.
                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          797; PubMed=7970700;
                                                                                                                                                                                                                                                                                                                          Created)
                                                            55.6%;
                              9084 MW;
                                                                           61.5%;
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                                                                                        onservative
                                                                                                                                                                                                                                                                                           STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                OR PLML
                                                                                                                                                                                                                                                                                                                                                                                                     1-like)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; BC002039; AAH02039.1; -.
PIR; S61552; S61552.
MGD; MGI:107497; Fxyd3.
InterPro; IPR003272; AIP1G1 PLM_MAT8.
Pfam; PF02038; AIP1G1 PLM_MĀT8; 1.
PROSITE; PS01310; FXYD; 1.
Transmembrane; Signal; Ionic channel; Chloride channel; Chloride;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sweadner K.J., Rael E.;
"The PXTD gene family of small ion transport regulators or channe clark protein signature sequence, and expression.";
Genomics 68:41-56(2000)
-!- FUNCTION: Induces a hyperpolarization-activated chloride curr
                      activating endogenous oocyte channels.
-!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
-!- TISSUE SPECIFICITY: Expressed in a subset of murine breast ti.
-!- MISCELLANEOUS: Marker of a cell type preferentially transform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           v
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rat
when expressed in xenopus oocytes. May be a modulator capable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FXYD DOMAIN-CONTAINING ION TRANSPORT REGULATOR 3.
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Lee N.H., Glodek A., Chandra I., Mason T.M., Quackenbush J.,
Kerlavage A.R., Adams M.D.;
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EXTRACELLULAR (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9CD61684B856E35D CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOPLASMIC (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 241.5; DB 1
Pred. No. 8.5e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-SEP-2003 (Rel. 42, Created)
15-SEP-2003 (Rel. 42, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88 AA
                                                                                                                                                neu or ras oncoprotein.
-!- SIMILARITY: Belongs to the FXYD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60 KCKYKSSQKQHSPVPEKAIPLITPGSATTC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60 KCKCKFROKP-SHRPGEGPPLITPGSAHNC 88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 57.8%;
Matches 52; Conservative 1
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TISSUE=UTinary bladder;

X MEDLINE=22389257; PubMed=12477932;

X Strausberg R.L., Faringold B.A., Grouse L.H., Derge J.G.,

A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy

A Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.I.

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk

A Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
                                           EMBL; AB015759; BAA35078.1; -.
InterPro; IPR000272; ATPLG1 PLM MAT8.
Pfam; PF02038; ATPIG1 PLM MĀT8; 1.
PROSITE; PS01110; PXT5; 1.
Transmembrane; Signal; Ionic channel; Chloride channel; Chloride
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         014802; 013211,
15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1998 (Rel. 36, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
FXYD domain-containing ion transport regulator 3 precursor (Chlcconductance inducer protein Mat-8) (Mammary tumor 8 kDa protein)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Breast;
MEDLINE=95138134; PubMed=7836447;
Morrison B.W., Moorman J.R., Kowdley G.C., Kobayashi Y.M., Jones
                                                                                                                                                                                           FXYD DOMAIN-CONTAINING ION TRANSPOR REGULATOR 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Mat-8, a novel phospholemman-like protein expressed in human br
tumors, induces a chloride conductance in Xenopus oocytes.";
J. Biol. Chem. 270:2176-2182(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                             1 MERVILA-LLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 230.5; DB 1; Length 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lei W., Wu M.;
Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                           EXTRACELLULAR (POTENTIAL)
                                                                                                                                                                                                                                                                                CYTOPLASMIC (POTENTIAL)
6CC7810B90512E5A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                        10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60 KCKYKSSQKQHSPVPEKAIPLITPGSATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60 KCKCKFSQKP-SHRPGDAPPLITPGSAHDC
          or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                 POTENTIAL.
                                                                                                                                                                              POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                      38
59
88
9314 MW;
                                                                                                                                                                                                                                                                                                                                               50.0%;
                                                                                                                                                                                                                                                                                                                                                                                        52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                              17
88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FXYD3 OR MATS OR PLML.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Lung carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Human)
                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                      88 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                 18
                                                                                                                                                                                                                                           3.9
60
                                                                                                                                                            lon transport.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HUMAN
                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Leder P.;
                                                                                                                                                                                                                                                              TRANSMEM
                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                      DOMAIN
                                                                                                                                                                                                                                                                                  DOMAIN
                                                                                                                                                                              SIGNAL
                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ROT entry is copyright. It is produced through a collaboration Swiss Institute of Bioinformatics and the EMBL outstation—Bioinformatics Institute. There are no restrictions on its profit institutions as long as its content is in no way this statement is not removed. Usage by and for commercial uires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOT entry is copyright. It is produced through a collaboration Swiss Institute of Bioinformatics and the EMBL outstation-Bioinformatics Institute. There are no restrictions on its -profit institutions as long as its content is in no way this statement is not removed. Usage by and for commercial uires a license agreement (See http://www.isb-sib.ch/announce)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FALSLIVILIAGIPTIDANDP-EDKOSPFYYDWHSIRVGGLICAGILCALGIIVINSG 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mano K., Hirano Y., Suzuki M., Takahashi E.-I., Terada T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VTLALL-LLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Rel. 41, Created)
(Rel. 41, Last sequence update)
(Rel. 41, Last annotation update)
containing ion transport regulator 3 precursor (Chloride inducer protein Mat-8) (Mammary tumor 8 kDa protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    to R\,\cdot\,, \rho . P\,\cdot\, t_{\rm YPe} transporting ATPases and chromosomal locations ss.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : Induces a hyperpolarization-activated chloride current ressed in xenopus oocytes. May be a modulator capable of mg endogenous oocyte channels.
LAR LOCATION: Type I membrane protein (Potential).
TY: Belongs to the FXYD family.
                                                                                                                                                                                                                                                                                                                                                                           FXYD DOMAIN-CONTAINING ION TRANSPORT REGULATOR 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 etazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
theria, Cetartiodactyla, Suina, Suidae, Sus.
ng endogenous oocyte channels.
LAR LOCATION: Type I membrane protein (Potential).
TY: Belongs to the FXXD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOPLASMIC (POTENTIAL). 45AFE872FD1AF944 CRC64;
                                                                                                                                                                                                                                                                                                                                      Ionic channel; Ion transport.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50.9%; Score 234.5; DB ] 56.7%; Pred. No. 4:6e-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YKSSQKQHSPVPEKAIPLITPGSATTC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CKFSQKP-SHRPGDGPPLITPGSAHNC 88
                                                                                                                                                                                                              mail to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                          POTENTIAL
                                                                                                                                                                                                                                                   65; -; NOT ANNOTATED CDS.
R000272; ATP1G1 PLM MATE.
8; ATP1G1 PLM MATE; 1.
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STANDARD;

mucosa;

M.N.A

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Conservative

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1310; FXYD; 1

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Signal;

38 59 88

AA;

87 AA

83 88

25; Indels

.2e-17;

. 80

FXYD1 OR PLM. Homo sapiens (Human) SEQUENCE FROM N.A. SEQUENCE FROM N.A. NCBI_TaxID=9606; testis. OT entry is copyright. It is produced through a collaboration Swiss Institute of Bioinformatics and the EMBL outstation-Bioinformatics Institute. There are no restrictions on its profit institutions as a its content is in no way this statement is not removed. Usage by and for commercial ires a license agreement (See http://www.isb-sib.ch/announce/ 4; TLALLL-LAGITALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSG 59 ECIFICITY: Expressed in a subset of human breast tumors. EOUS: Marker of a cell type preferentially transformed by ton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., adan A., Young A.C., Shevchenko Y., Bouffard G.G., ., Touchman J.W., Green E.D., Dickson M.C., ., Grimwood J., Schmutz J., Myers R.M., Schwinski M.I., Skalska U., Smailus D.E., Schein J.E., Jones S.J.M., Marra M.A., an initial analysis of more than 15,000 full-length Gaps se CDNA sequences."; cad. Sci. U.S.A. 99:16899-16903(2002).
Induces a hyperpolarization-activated chloride current essed in xenopus occytes. May be a modulator capable of g endogenous occyte channels.

AR LOCATION: Type I membrane protein (Potential). FXYD DOMAIN-CONTAINING ION TRANSPORT -> SEWRSSGEOAGRGWGSPPLTTQLSPTG (IN Signal; Ionic channel; Chloride channel; Chloride; 5, Rel. 41, Last sequence update)
Rel. 42, Last annotation update)
precursor (FXYD domain-containing ion transport 46.5%; Score 214.5; DB 1; Length 87; 54.5%; Pred. No. 5.9e-16; ive 11; Mismatches 24; Indels 5 EXTRACELLULAR (POTENTIAL). CYTOPLASMIC (POTENTIAL). MISSING (IN REF. 2). 6D674D668EB32493 CRC64; C:integral to plasma membrane; TAS. F:chloride channel activity; TAS. 92 AA. Y: Belongs to the FXYD family. 1; P:chloride transport; TAS. 000272; ATP1G1 PLM MAT8. ail to license@isb-sib.ch). CSSOKO-HSPVPEKAIPLITPGSA 86 KFGQKSGHH--PGETPPLITPGSA 85 POTENTIAL. POTENTIAL. AA73922.1; -. AAH05238.1; -. Rel. 36, Created)

310; FXYD; 1

20

9263 MW;

AA;

38 59 37 58

onservative

À,

STANDARD;

waareeen

CAA63604.1; -.

027; FXYD3.

oncoprotein.

TISSUR=Brain, Lung, and Testis;

MEDINE=22388257; PubMed=12477932;

A Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenko L., Marusina K., Farmer A.A. Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz J.

A Brownstein M.J., Usdin T.B., Torshywik S., Carihici P., Prange C.

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.F.

A Richards S., Worley K.C., Hale S., García A.M., Gay L.J., Hulyk S.

A Nithing M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,

A Multing M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,

Blakesley R.W. Touchman J.W., Green E.D., Dickson M.C.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Blakesley R.W. Krzywinski M.I., Skalska U., Smailus D.E.,

Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

T human and mouse cDNA sequences.";

I human and mouse cDNA sequences.";

I human and mouse cDNA sequences."; muscle contraction.

-!- SUBCELLULAR LOCATION: Type I membrane protein.
-!- TISSUE SPECITY: Highest expression in skeletal muscle and heart. Moderate levels in brain, placenta, lung, liver, pancr uterus, bladder, prostate, small intestine and colon with muclining. Very low levels in kidney, colon and small intestine without mucosa, prostate without endothelial lining, spleen, Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- FUNCTION: Induces a hyperpolarization-activated chloride curr
when expressed in xenopus occytes. May have a functional role -!- PTM: Major plasma membrane substrate for camp-dependent prote kinase (PK-A) and protein kinase C (PK-C) in several differen tissues (By similarity). Phosphorylated in response to insuladrenergic stimulation. This SWISS-PROT entry is copyright. It is produced through a coll between the Swiss Institute of Bioinformatics and the EMBL out the European Bioinformatics Institute. There are no restriction use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for centies requires a license agreement (See http://www.isb-sib.ch/or srend an email to license@isb-sib.ch/.). TISSUB=Heart;
MEDLINE=97312702; PubMed=9169143;
Chen L.-S.K., Lo C.F., Numman R., Cuddy M.;
"Characterization of the human and rat phospholemman (PLM) cDNAs
localization of the human PLM gene to chromosome 19913.1."; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Sweadner K.J., Rael E., "The FXYD gene family of small ion transport regulators or ch cDNA sequence, protein signature sequence, and expression.", MIM; 602359; -. GO; GO:0005887; C:integral to plasma membrane; TAS. -!- SIMILARITY: Belongs to the FXYD family. SEQUENCE FROM N.A. MEDLINE=20408885; PubMed=10950925; EMBL; U72245; AAC51286.1; -. EMBL; BC032800; AAH32800.1; -. Genomics 41:435-443(1997) Genomics 68:41-56(2000). Genew; HGNC:4025; FXYD1. MIM; 602359; -.

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CYTOPLASMIC (POTENTIAL).
PHOSPHORYLATION (BY PKC AND PKA) (I
        entities requires a license agreement (See http://www.isb-sib.ci
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Re
                                                                                                                                                                                                                                                                                                                                          PHOSPHORYLATION (BY PKA) (BY SIMILA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a col between the Swiss Institute of Bioinformatics and the EMBL ou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 LLLLLAG-LTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yamaguchi F., Yamaguchi K., Tai Y., Sugimoto K., Tokuda M.;
"Molecular cloning and characterization of a novel phospholemmar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q91XV6; Q9JLR4;
28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
FXYD domain-containing ion transport regulator 6 precursor (Vaseddothelial cell specific protein 6) (VESP6) (Phosphohippolin)
FXYD6 OR PHP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein from rat hippocampus.";
Brain Res. Mol. Brain Res. 86:189-192(2001).
-!- SUBCELLUTAR LOCATION: Type I membrane protein (Potential).
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aoki T., Toyoda H., Nishimoto S., Tawara J., Komurasaki T.,
"Identification of VESP6, a vascular endothelial cell specific
                                                                                                                                                                                                                                                                                                                                                                                                     Score 126.5; DB 1; Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                              EXTRACELLULAR (POTENTIAL)
                                                                                                                                                             Transmembrane, Phosphorylation, Signal, Ionic channel, Chloride channel, Chloride, Ion transport.
                                                                                                                                                                                                                                                                                                                                                                890DE301BF8E740A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                        ; Pred. No. 1.2e-06; 15; Mismatches 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 AA.
                                                                                                                                                                                                                             PHOSPHOLEMMAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-Sprague-Dawley, TISSUE-Hippocampus, MEDLINE-21105932; PubMed=11165386;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- SIMILARITY: Belongs to the FXYD family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sold=Q91XV6-2; Sequence=VSP_001586;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IsoId=Q91XV6-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                           SIMILARITY)
                                                                                                                                                                                                                                                                  POTENTIAL
                                                               EMBL; M63934; -; NOT ANNOTATED CDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                  PIR; A40533; A40533. TINTEXFORCE, IRCOOZ72; ATPLG1 PLM PFG2033; ATPLG1 PLM MATB; PROSITE; PS01310; EXYD; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. (ISOFORM 1).
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                                                                                                                                                                                                                                                                                                                                                              10500 MW;
                                                                                                                                                                                                                                                                                                                                                                                                       27.48;
                                                                                                                                                                                                                                                                                                                                                                                                                            41.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                            29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                             92
92
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93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67 QKQHSPVPEK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66 QQQRTGEPDE 75
                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                            92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10116;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein.";
                                                                                                                                                                                                                                         DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKCKYKSSQKQHSPV 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scott B.T., Jones L.R.; n and complete sequence determination of the major plasma strate for cAMP-dependent protein kinase and protein
                                                                                                                                                                                                                                                                                                                                                                                                                      2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : Induces a hyperpolarization-activated chloride current ressed in xenopus oocytes. May have a functional role in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DECIFICITY: Present in heart, esophagus, stomach, aorta, muscle, smooth muscle, and liver but absent from brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or plasma membrane substrate for camp-dependent protein PK-A) and protein kinase C (PK-C) in several different Phosphorylated in response to insulin and adrenergic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      etazoa; Chordata; Craniata; Vertebrata; Euteleostomi; theria; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                ie; Phosphorylation; Signal; Ionic channel; unal; Chloride; Ion transport.

21 20 BY SIMILARITY.
21 35 EXTRACELLULAR (POTENTIAL).
35 56 POTENTIAL.
57 2 CYTOPLASMIC (POTENTIAL).
83 83 PHOSPHORYLATION (BY PKC AND PKA).
84 88 PHOSPHORYLATION (BY PKC).
57 5 5 6 -> H (IN REF. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tel. 36, Last sequence update)
tel. 41; Last annotation update)
precursor (FXYD domain-containing ion transport
                                                                                                                                                                                                                                                                                                                                                                           28.0%; Score 129; DB 1; Length 92; 41.3%; Pred. No. 6.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                    20; Indels
                                                                                                                                                                                                                                                                                                                                      11602EFEAFFD8BD8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAR LOCATION: Type I membrane protein.
PECIFICITY: Present in heart, esophagus
154; F:chloride channel activity, TAS.
121; P:chloride transport; TAS.
136; P:muscle contraction; TAS.
7R00272; ATPIGI PLM MATE.
18; ATPIGI PLM MATE.
                                                                                                                                                                                                                                                                                                                                                                                                 ; Pred. No. 6.5e-
15; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TY: Belongs to the FXYD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 N.A., AND SEQUENCE OF 21-92. icular muscle;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266:11126-11130(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0422; PubMed=1710217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (By similarity)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Rel. 36, Created)
                                                                                                                                                                                                                                                                                                                                        10441 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   myocardium."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ontraction.
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75

23; Indels

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Bioinformatics Institute. There are no restrictions on its profit institutions as long as its content is in no way this statement is not removed. Usage by and for commercial ires a license agreement (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oba R., Kato K., Marsubara K.;
like ion channel gene expressed in the nervous system.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rel. 41, Created)
Rel. 41, Last sequence update)
Rel. 41, Last annotation update)
ontaining ion transport regulator 6 precursor (PLM-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
heria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
090;
                                                                                                                                                                                                                                                                                                                                                                                FXYD DOMAIN-CONTAINING ION TRANSPORT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27.0%; Score 124.5; DB 1; Length 94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37.5%; Pred. No. 2e-06; ive 15; Mismatches 37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                     EXTRACELLULAR (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOPLASMIC (POTENTIAL). Missing (in isoform 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1C0D35FA0C572451 CRC64;
                                                                                                                                                                                                                                                                                                    Signal; Ionic channel; Ion transport;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /FTId=\overrightarrow{VSP} 001586.
N -> S (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94 AA
                                                                                                                                                                                                                                                                                                                                                                                                            REGULATOR 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SSOKOHSPVPEKA--IPLITPGSA 86
                                                                                                             ail to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FNOKPRAPGDEEAQVENLITINAA 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                            POTENTIAL.
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                                                                                                                                                                                   9; AAF66613.1; -.
300272; ATP1G1 PLM MAT8.
; ATP1G1_PLM_MAT8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N.A. (ISOFORM 1).
                                                                                                                                                                8; BAB62242.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10388 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             onservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Q9CXD0;
                                                                                                                                                                                                                                                                                                                                                                                  94
                                                                                                                                                                                                                                                                                                    .Signal;
plicing.
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32 12

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SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).

SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).

STRAIN=F208JN; TISSUE=Brain;

MEDLINE=223BES15; PubMed=12477932;

A Strausberg R.L.; Feingoll E.A.; Grouse L.H., Derge J.G.,

Rausner R.D., Collins P.S., Wagner L., Shemmen C.M., Schuler G.I.

A Altschul S.F., Zeeberg B., Buetow K.H., Schemefer C.F., Bhar N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Batchenko L., Marueina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C.

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy E.

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.F.

Richards S., Worley K.C., Hale S., Garcia A.M., Gay, L.J., Hulyk E.

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay, L.J., Hulyk E.

A Nithing M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Bakesley R.W., Tucuham M.W., Green E.D., Dickson M.C.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Balkesley R.W., Truchman W.J. Skalska U., Smailus D.E.,

Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences ";

Proc. Nall. Acad. Sci. U.S.A. 99:16999-16903(2002).

-! - Alternative Products: Type I membrane protein (Potential).
Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato. K., Schoenbach C., Seya T., Shibata Y., Storch K. Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilmir Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a coll between the Swiss Institute of Bioinformatics and the EMBL out the Buropean Bioinformatics Institute. There are no restriction use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.ch/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FXYD DOMAIN-CONTAINING ION TRANSPORT
REGULATOR 6.
EXTRACELLULAR (POTENTIAL).
                                                                                                                                                               Hayashizaki Y.;
"Functional annotation of a full-length mouse cDNA collection.";
Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           / Match 26.8%; Score 123.5; DB 1; Length 94; Local Similarity 37.5%; Pred. No. 2.5e-06; Nes 33; Conservative 15; Mismatches 37; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOPLASMIC (POTENTIAL).
Missing (in isoform 2).
/FIId=VSP_001585.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02E22B0BE349CB51 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AK003888; BAB23058.1; -.
EMBL; AK018354; BAB31174.1; -.
EMBL; BC042579; AA442579.1; -.
EMBL; BC042579; AA412127.1; -.
MGD; MGI:1890226; Fxyd6.
InterPro; IPR000272; APPIGI PLM MAT8.
PROSITE; PS01310; FXYD; IL
Transmembrane; Signal; Ionic channel; Ion transport;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IsoId=Q9D164-2; Sequence=VSP 001585;
-!- SIMILARITY: Belongs to the FXYD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IsoId=Q9D164-1; Sequence=Displayed;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 AA; 10374 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      34
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U

Matches

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VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGK 60
                                                                               | : ||| : || || :| || :| || || || || :| || :| || :| || :| || :| || :| || :| || :| || :| || :| VLVLCSLLAPVVLASAAEKEKEK-DPFYYDXQTLRIGGLVFAVVLFSVGILLILSRR 59
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KSSQKQHSPVPEKA--IPLITPGSA 86 87 SFNOKPRAPGDEEAQVENLITINAA

92 AA. PRT; STANDARD;

n precursor (FXYD domain-containing ion transport (Rel. 41, Last sequence update) (Rel. 41, Last annotation update) (Rel. 41, Created)

etazoa, Chordata, Craniata, Vertebrata, Euteleostomi, theria, Rodentia, Sciurognathi, Muridae, Murinae, Mus. (Mouse)

3265; PubMed=11410367; Jia L.G., Kobayashi Y.M., Palmer C.J., Mounsey J.P., , Jones L.R., Tucker A.L.; ure and expression of phospholemman in mouse."; 79(2001). M N.A.

/61; TISSUE=Kidney;
56(0) PubMed=11217851;
inagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
zawa M., Nishi K., Kiyosawa H., Kando S., Yananaka I.,
azaki Y., Gojobori T., Bono H., Kaukawa T., Saito R.,
atsuda H.A., Ashburner M., Batalov S., Casavant T.,
W., Gasterland T., Gissi C., King B., Kochiwa H.,
W., Saubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
ido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
ido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
ifelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
'Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.
rchionni L., Mashima J., Mazzarelli J., Mombacts P.,
Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
ato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
oyo-oka K., Wang K.H., Weitz C., Whithaker C., Wilming L.,
s A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

annotation of a full-length mouse cDNA collection.";

Induces a hyperpolarization-activated chloride current ressed in xenopus oocytes. May have a functional role in ontraction (By similarity).

LAR LOCATION: Type I membrane protein.

or plasma membrane substrate for camp-dependent protein PK-A) and protein kinase C (PK-C) in several different Phosphorylated in response to insulin and adrenergic ion (By similarity).

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Щ. Rattus norvegicus (Rat). Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Ra NCBI_TaxID=10116; Chen L.-S.K., Lo C.F., Numann R., Cuddy M.; "Characterization of the human and rat phospholemman (PLM) cDNAs localization of the human PLM gene to chromosome 19q13.1."; Genomics 41:435-443(1997). PHOSPHORYLATION (BY PKA) (BY SIMILA 4 VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLS S, PHOSPHORYLATION (BY PKC AND PKA) 28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Phospholemman precursor (FXYD domain-containing ion transport ; Score 115.5; DB 1; Length 92; ; Pred. No. 1.7e-05; 17; Mismatches 26; Indels Signal; Ionic channel; transport. BY SIMILARITY. PHOSPHOLEMMAN. EXTRACELLULAR (POTENTIAL) OBDB1DC83417F3AD CRC64; CYTOPLASMIC (POTENTIAL) 92 AA. POTENTIAL. PRT; MEDLINE=97312702; PubMed=9169143; Pfam; PF02038; ATP161 PLM MAT8; PROSTIR: PS01310; PXYD; 1 Transmembrane; Phosphorylation; Chloride channel; Chloride; Ion EMBL; AF091390; AAD11781.1; -. EMBL; AF089734; AAD41683.1; -. EMBL; AK002585; BAB22208.1; -. MGD; MGI:1889273; Fxydl.
InterPro; IPR000272; ATP1G1_PLI 15-JUL-1998 (Rel. 36, Created) 28-FBB-2003 (Rel. 41, Last seq. 28-FBB-2003 (Rel. 41, Last anno 25.1%; 34.2%; 10323 MW; 25; Conservative 92 | :|:| : |:: 63 KFNQQQRTGEPDE 75 STANDARD; 64 KSSQKQHSPVPEK 20 32 32 83 83 Local Similarity 92 AA; SEQUENCE FROM N.A. 21 21 36 57 83 88 rissue=Heart; regulator 1). FXYD1 OR PLM. **PRANSMEM** SEQUENCE Query Match DOMAIN MOD_RES MOD RES CHAIN 008589 SIGNAL Matches RESULT 13 PLM_RAT g à ð

SEQUENCE FROM N.A. MEDLINE=20408885; PubMed=10950925;

Sweadner K.J., Rael E.; "The FXYD gene family of small ion transport regulators or chann cDNA sequence, protein signature sequence, and expression."; Genomics 68:41-56(2000).

-!- SUBCELLULAR LOCATION: Type I membrane protein.
-!- FTM: Major plasma membrane substrate for camp-dependent prot kinase (PK-A) and protein kinase C (PK-C) in several differe tissues. Phosphorylated in response to insulin and adrenergi -i- FUNCTION: Induces a hyperpolarization-activated chloride cur when expressed in xenopus occytes. May have a functional rol muscle contraction.

-!- SIMILARITY: Belongs to the FXYD family. stimulation (By similarity)

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Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy Bosak S.A., McBwan P.J., McKernan K.J., Malek J.A., Gunaratne P. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Fulyk Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Whiting M., Madan A., Rodrigues S., Sanche Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.M., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.B., Jones S.J.M., Marra M.A.; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sodium/potassium-transporting Arpase gamma chain (Sodium pump gan chain) (Na+/K+ Arpase gamma subunit) (FXYD domain-containing ion transport regulator 2).

FXYD2 OR Arpigi OR Arpig.

Bos taurus (Bovine).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidee
                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collective the Swiss Institute of Bioinformatics and the EMBL out the Buxpean Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.ch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FXYD DOMAIN-CONTAINING ION TRANSPOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6 LALLLLAGLTALEANDPFANKD --- DPFYYDWKNLQLSGLICGGLLAIAGIAAVL
                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
-!- SIMILARITY: Belongs to the FXYD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 112.5; DB 1; Length 95;
; Pred. No. 3.7e-05;
14; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EXTRACELLULAR (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
CYTOPLASMIC (POTENTIAL).
3F083146A42422CE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro: IPR00272; ATP1G1 PLM MAT8.
Pfam; PF02038; ATP1G1 PLM MĀT8; 1.
PROSITE; PS01310; FXYD; 1.
Transmembrane; Signal; Ionic channel; Ion transport.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-0CT-1993 (Rel. 27, Created)
01-0CT-1993 (Rel. 27, Last sequence update)
28 FBB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGULATOR
                                                                                                                                                                                                                                                    human and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL, AL136699; CAB66634.1; -. EMBL, BC018652; AAH18652.1; -. Genew; HGNC:4030; FXXD6. MIM, 606683; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10542 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63 YKSSQKQHSPVPEKA 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63 CSFNOKPRAPGDEEA 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bovidae, Bovinae, Bos.
NCBI TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
36
59
95 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATNG BOVIN
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TRANSMEM
DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                    SIMILARITI).
PHOSPHORYLATION (BY PKA) (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             257; PubMed=12477932;
L., Feingold E.A., Grouse L.H., Derge J.G.,
Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKCKY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Gaps
                                                                                                                                                                                                                                                                                                                                             CYTOPLASMIC (POTENTIAL).
PHOSPHORYLATION (BY PKC AND PKA) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eil B., Wellenreuther R., Gassenhuber J., Glassl S., oecher M., Bloecker H., Bauersachs S., Blum H., esterhoeft A., Beyer A., Koehrer K., Strack N., Ottenmaelder B., Obermaier B., Tampe J., Heubner D., orn B., Klein M., Poustka A.; talog of human genes and proteins: sequencing and Onovel complete protein coding human cDNAS.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ontaining ion transport regulator 6 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24.5%; Score 113; DB 1; Length 92. arity 31.5%; Pred. No. 3.2e-05; Onservative 18; Mismatches 28; Indels
                                                                                                                                                                                                                                                                                                         EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                               SPG -> PLH (IN REF. 1).
IAGI -> AGIL (IN REF. 1).
29530D084B3CB7C2 CRC64;
                                                                                                                                                                                                                           Phosphorylation; Signal; Ionic channel;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41, Last sequence update)
42, Last annotation update)
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                                                                                                                                                                                                                                                               BY SIMILARITY PHOSPHOLEMMAN
                                                                                                                                                                                                                                            nnel; Chloride; Ion transport
                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY)
                                                                                                                                                                                                                                                                                                                                POTENTIAL.
                                                                                                                                                              1000272; ATPIGL PLM MAT8.

3; ATPIGL PLM MAT8; 1.

1310; FXYD; 1.
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heria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                46
10365 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1:422-435(2001).
                                                                                                                                           : AAC53169.1;
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OORTGEPDE 75
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                                                                                                                                                                                                                                                                                                         35
56
92
83
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PROT entry is copyright. It is produced through a collaboration sowiss Institute of Bioinformatics and the EMBL outstation - Bioinformatics and the EMBL outstation - 1 Bioinformatics Institute. There are no restrictions on its 1-profit institutions as long as its content is in no way it this statement is not removed. Usage by and for commercial juines a license agreement (See http://www.isb-sib.ch/announce/amail to license@isb-sib.ch).
                                    Blemesderier D., Directories and immunological characterization of the gamma a small protein associated with the Na, K-ATPase."; 1.121:579-586(1993).
Whay be involved in forming the receptor site for cardiac le binding or may modulate the transport function of the
                                                                                                                                                                                                                                                                                                                   JAR LOCATION: Type III membrane protein (Potential).
SPECIFICITY: Highest levels expressed in the kidney and
Restricted to the basolateral membrane in renal epithelial
d varies in its level of expression along the nephron.
ITY: Belongs to the FXXD family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                           : Composed of three subunits: alpha (catalytic), beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PYYDWKNLOLSGLICGGLLAIAGIAAVLSGKCKYKSSQKQHSPVPEKAI 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
20.9%; Score 96.5; DB 1; Length 58; 34.6%; Pred. No. 0.0011; Live 14; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 39 POTENTIAL.
38 AA; 6545 MW; 54B590B816731183 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , D46435.
PR000272; ATPIGL PLM MATB.
38; ATPIGL PLM MATB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; CAA49663.1; -.
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Copyright (c) 1953 - 2004 Compugen Ltd. Jin search, using sw model ABAUTALIZATATALEAN. ASSUMED ASS	7 097UY7 097UY7 097UY7 096UY9 096UY9 096UY9 096US9 096UG3 096UG3 096UG3 096UG3 096UG3 096UY7 096UY9	41 63 13.7 655 16 QBDIN3 QBdun3 42 63 13.7 825 12 Q993G5 Q993G5 43 63 13.7 912 16 QBD4N3 QBd4N3 QBG4N3 44 63 13.7 923 5 Q9N369 45 63 13.7 1022 5 Q27779 Q9n389 ALIGNMENTS	RESULT 1 QBETD2 ID QGETD2 ID COSTULY AC QBETD2 DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update) DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update) DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update) DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update) DT 01-MAR-2003 (TrEMBLrel	RC STRAIN=C57BL/6J; TISSUE=Body; RX MEDLINE=22354683, PubMed=12466851; RA The FANTOM Consortium, RA The RIKEN Genome Exploration Research Group Phase 1 & II Team; RA The RIKEN Genome Exploration Research Group Phase 1 & II Team; RT "Analysis of the mouse transcriptome based on functional annotat: RI 60,770 full-length cDNAs."; RL Nature 420:563-573 (2002). DR EMBL; AK004113; BAC25067.1; - SQ SRQUENCE 80 AA, 8487 MW; 135CEB39C7A01CDC CRC64:	Duery Match 18.4%; Score 85; DB 11; Sest Local Similarity 29.5%; Pred. No. 0.04; Atches 23; Conservative 14; Mismatches 31 11 LAGLTALEANDPRANKDDPRYYDMKNLOLSGLICGGI
	nCore version 5.1.6 1993 - 2004 Compugen Ltd. ing sw model 4, 16:00:40; Search time 36 Seconds (without alignments) 637.963 Million cell updates/ 0 LTALEANHSPVPEKAIPLITPGSATTC 89 pext 0.5 8052604 residues chosen parameters: 830525	* 10 4 * 10 T	## # # # # ## ## ## ## ## ## ## ## ## #	results predicted by cha to the score of the res of the total score distr SUMMARIES	QBBTD2 QBIMS1 QBIMS1 QBIMS1 QBIMS5 QBCD4 QBD0Y1 Q94E19 Q94E19 Q94E19 Q9K313 Q9K313 Q8K313 Q8E56 QBED96

17,

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Nakashima N., Koizumi M., Watanabe H., Hiroaki N.;
"Complete nucleotide sequence of the Nilaparvata lugens recviru:
putative member of the genus Fijivirus.";
J. Gen. Virol. 77:139-146(1996).
EMBL; D49696; BAA08545.1;
Interpro, IRROO2877; FtsJ.
Ffam; PF01728; FtsJ; 130041 MW; GEBF5714B8EA0576 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kunst F., Ogasawara N., Moszer I., Albertini A.M., Alloni G., Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S., Bortiss R., Boursier L., Brans A., Braun M., Brignell S.C., Brousliet S., Bruschi C.V., Caldwell B., Capuano V., Carter N.M. Choi S.K., Codani J.J., Connerton I.F., Cummings N.J., Daniel R. Denizot F., Devine K.M., Dusterhoft A., Ehrlich S.D., Emmerson F. Entian K.D., Errington J., Fabret C., Ferrari B., Foulger D., Fritz C., Fujita M., Fujita Y., Fuma S., Galizzi A., Galleron N.
   ---DLGGIFSGIGGMLGSIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 LLAGLTALEANDPFANKDDPFYYDWKN-----LQLSGLICGGLLAIAGIAAVLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15.8%; Score 73; DB 12; Length 1132; 28.6%; Pred. No. 19; ive 17; Mismatches 22; Indels 16
                                                                                                                                                                                                                                                                                         viruses; Reoviridae; unclassified Reoviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
Lapidus A., Galleron N., Sorokin A., Ehrlich D.;
Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus
                                                                                                                                                                                                                 (TrEMBLrel. 01, Last sequence update)
(TrEMBLrel. 19, Last annotation update)
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Last annotation update)
                                                                                                                                                                       PRT; 1132 AA.
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                                                GKCKYKSSQKQ----HSPVPEKALPL
 01-NOV-1996 (TrEMBLrel. 01, Created)
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MEDLINE=98044033; PubMed=9384377;
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                                                                                                                                                                                                                                                                    Nilaparvata lugens reovirus
Viruses; dsRNA viruses; Reov
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                                                                                                                                                                      PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacillus subtilis.
                                                                                                                                                                                                                                                                                                  NCBI_TaxID=33724;
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                                                                                                                                                                                                                                                      130KD protein.
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01-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                ., Takao J., Das A., Cruz P.D. Jr., Ariizumi K.; ion of genes for secreted and membrane-anchored proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     letazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22; Indels 25; Gaps
                                                                                                                             Craniata; Vertebrata; Euteleostomi;
Catarrhíni; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ence of the nematode C. elegans: a platform for
ig biology. The C. elegans Sequencing Consortium.";
2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                     15.9%; Score 73.5; DB 5; Length 196; 30.7%; Pred. No. 2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                    -----NKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKC 61
                                                                                                                                                                                                                                                                                                                                               18.2%; Score 84; DB 4; Length 178; 40.4%; Pred. No. 0.13; ive 7; Mismatches 15; Indels
                                                                                                                                                                                                                                                 :ytes.";
)CT-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e of C. elegans cosmid F49F1."; or-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NG-2001) to the EMBL/GenBank/DDBU databases.
i56; AAF99970.1; -.
PT.3; CE25894.
                                                                                                                                                                                                                                                                                                                .78 AA; 19313 MW; 8129C0AD3A449584 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA; 20528 MW; 41FA957F66B44399 CRC64;
                                           (TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
38 associated transmembrane protein 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TrEMBLrel. 16, Created)
(TrEMBLrel. 16, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
178 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Mismatches
                                 Created)
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9613; PubMed=9851916;
                                                                                                                        Tetazoa; Chordata;
Itheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20.5 kDa protein.
                           (TrEMBLrel. 23, C
(TrEMBLrel. 23, I
(TrEMBLrel. 23, I
                                                                                                                                                                                                                                                                                382; AA013166.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         elegans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amsley P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein.
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                                                                                                              (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M N.A.
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Nature 413:523-527(2001).
EMBL; AJ414155; CAC92299.1; -.
Pfam; PF04284; DUF441; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yersinia pestis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=632;
                                                                            Hypothetical
                                                                                               SEQUENCE
                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8DOY1;
                                                                                                                                                                                                                                                                                                                                                                                                                                    OBDOY1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9LUKB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9LUKB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
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                S KW DR
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laser P., Goffeau A., Golightly E.J., Grandi G.,
Guy B.J., Haga K., Haiech J., Harwood C.R., Henaut A.,
Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,
ramata D., Kasahara Y., Klaerr-Blanchard M., Klein C.,
Koetter P., Koningstein G., Krogh S., Kumano M.,
apidus A., Laidinois S., Lauber J., Lazarevic V.,
vine A., Liu H., Masuda S., Mauel C., Medigue C.,
allado R.P., Mizuno M., Moestl D., Nakai S., Noback M.,
Reilly M., Ogawa K., Ogiwara A., Oudega B., Park S.H.,
hl T.M., Portetelle D., Porvollik S., Prescott A.M.,
Pujic P., Purnelle B., Rapoport G., Rey M., Reynolds S.,
ivollec C., Rocha B., Roche B., Rose M., Sadaie Y.,
nlan E., Schleich S., Schroeter R., Scoffone F.,
Sekowska A., Seror S.J., Serror P., Shin B.S.,
Takagi T., Takahashi H., Takemaru K.,
Tanakoshi A., Tanaka T., Terpstra P., Tognoni A.,
Thyama S., Vandenbol M., Vannier F., Vassarotti A.,
nbutt R., Wedler E., Wedler H., Weitzenegger T.,
vipat A., Yamamoto H., Yamane K., Yasaramoto H., Yamane K., Yata K.,
foshikawa H.F., Zumstein E., Yoshikawa H., Danchin A.,
genome sequence of the gram-positive bacterium Bacilus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPHĖVASDEPWVIDRLGKDRMKTAFAWKTLISKĠILČAĠGSDAPIEPVDPLLGIQ- 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANDPFANKDDPFYYD-----LLAIAG 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    415, PubMed=11586360, Wren B.W., Thomson N.R., Titball R.W., Holden M.T.G., Sebaihia M., James K.D., Churcher C., Mungall K.L., ham D., Bentley S.D., Brooks K., Cerdeno-Tarraga A.M., T., Cronin A., Davies R.M., Davis P., Dougan G., Hamlin N., Holroyd S., Jagels K., Karlyshev A.V., oule S., Cyston P.C.F., Quail M., Rutherford K., Skelton J., Stevens K., Whitehead S., Barrell B.G.; nce of Yersinia pestis, the causative agent of plague.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  teobacteria; Gammaproteobacteria; Enterobacteriales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15.4%; Score 71; DB 16; Length 529; 30.4%; Pred. No. 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     isawara N., Yoshikawa H., Danchin A.;
3V-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LR-----KSSHEONGPSYNESECLPVYEAIKLYTEGSA 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA; 58476 MW; A582764A05C8AC12 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LSGKCKYKSSQKQHSP-----VP-EKAIPLITPGSA 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TrEMBLrel. 20, Created)
TrEMBLrel. 20, Last sequence update)
TrEMBLrel. 23, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1006680; Amidohydro 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30; AAC00311.1; -.; CAB14933.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Amidohydro 1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aceae; Yersinia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            9-256 (1997)
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Phosphate/phosphenolpyruvate translocator protein-like.
Arabidopsis thaliana (Mouse-ear cress).
Musaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosi eurosids II; Brassicales; Brassicaceae; Arabidopsis.
NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14; Mismatches 32; Indels 14; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=KIMS / Biovar Mediaevalis;
MEDLINE-22137863; PubMed=12142430;
Deng W., Burland V., Plunkett G. III, Boutin A., Mayhew G.F., Li
Perna N.T., Rose D.J., Mau B., Zhou S., Schwartz D.C.,
Fetherston J.D., Lindler L.E., Brubaker R.R., Plano G.V.,
Straley S.C., McDonough K.A., Nilles M.L., Matson J.S., Blattner
                                                                                                                                                                                                  4 VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGI-AAVI
                                                                                                                                                                                                                                          26 VTLAILILIAIRITPINS------FFPW--VEKYGLTIGVLILITIGVAAPI»
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales
Enterobacteriaceae; Yersinia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 VTLALLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGI-AAVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15.0%; Score 69; DB 16; Length 150; 30.2%; Pred. No. 5.4; ive 14; Mismatches 32; Indels ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.0%; Score 69; DB 16; Length 157; 30.2%; Pred. No. 5.7;
11 protein; Complete proteome.
150 AA; 15409 MW; E30184B6E99C5B9B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Genome sequence of Yersinia pestis KIM.";
J. Bacteriol. 184:4601-4611(2002).
EMBL, AE013745; AAM84995.1; -.
Hypothetical protein.
SEQUENCE 157 AA; 16330 MW; A7DBE45EFFD414F6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last annotation update)
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 157 AA.
                                                                                                                                                                                                                                                                                                                      63 YKSSOKOHSPVPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80 ISASEVLHSFVOWKSILAIVVGVAVS 105
                                                                                                                                                                                                                                                                                                                                                                            73 ISASEVLHSFVQWKSILAIVVGVAVS 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 YKSSQKQHSPVPEKAIPLITPGSATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-WAR-2003 (TrEMBLrel. 23, 01-WAR-2003 (TrEMBLrel. 23, 01-WAR-2003 (TrEMBLrel. 23, 14) prothetical protein.
                                                                                                                                              26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
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                                                                                                          Best Local Similarity
Matches 26; Conserv
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20; Conservative
                                                                                                 33 DWKNLQLSGL----
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hes 22, Conservative
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                                                                                                                                                                                                                                                                                       330 LVSQGNTNT 338
                                                                                                                                                                                                                          80 LITPGSATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pasteurella multocida
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=747;
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Mitochondrion.
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Q9CL30;
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                                                                                                                                                                                                                                                                                                           analysis of Arabidopsis thaliana chromosome 3. I. Sequence the regions of 4,504,864 bp covered by sixty Pl and TAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ten H., Kim C.J., Koesema E., Meyers M.C., Banh J.,

Jarninci P., Dale J.M., Goldsmith A.D., Hayashizaki Y.,

Jang P.X., Jones T., Kamiya A., Karlin-Neumann G.,

Jam B., Lee d.M., Lin J., Liu S.Y., Miranda M., Narusaka M.,

Dnodera C.S., Palm C.J., Pham P.K., Quach H.L., Sakurai T.,

ski M., Southwick A., Tang C.C., Toriumi M., Yamada K.,

'Yu G., Yu S., Shinozaki K., Davis R.W., Theologis A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
ta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ien H., Cheuk R., Kim C.J., Meyers M.C., Banh J.,
Zarninci P., Chang E., Dale J.M., Goldsmith A.D.,
Y., Ishida J., Jones T., Kamiya A., Karlin-Neumann G.,
m B., Lee J.M., Lin J., Miranda M., Naruaska M.,
Dnodera C.S., Falm C.J., Quach H.L., Sakurai T., Satou M.,
Ithwick A., Tang C.C., Toriumi M., Wu H.C., Yamada X.,
Yu G., Yu S., Shinozaki K., Davis R.W., Theologis A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                    kamura Y., Kaneko T., Kato T., Asamizu B., Tabata S.;
JAN-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10; Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s cDNA clones."; NG-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4AR-2002) TO the EMBL/GenBank/DDBJ databases.
286; AAK95272.1; -
729; AAM10353.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       339 AA; 37532 MW; 74FD50039AEE9F4B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      785D5D610E5DFB86 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Pred. No. 16;
15; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14.9%; Score 68.5; 29.0%; Pred. No. 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .N21 19.
thaliana (Mouse-ear cress)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                              77480; PubMed=10819329;
                                                                                                                                                                                                                                                                                                                                                                                                                                       220; BAB01046.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37509 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORF clones.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                131-135 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SQGNTNT 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IPGSATT 88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N.A.
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                                                                                                                                                                              OM N.A.
                       OM N.A.
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DB 10; Length 340;

14.9%; Score 68.5;

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May B.J., Zhang Q., Li L.L., Paustian M.L., Whittam T.S., Kapur "Complete genomic sequence of Pasteurella multocida Pm70."; Proc. Natl. Acad. Sci. U.S.A. 98:3460-3465(2001).
BMBL; AE006178; AAKOS501.1; -
InterPro; IPR001807; Cl.channel volt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Actinopterygii, Neopterygii, Teleostei; Euteleostei, Neoteleoste
Acanthomorpha; Acanthopterygii, Percomorpha; Perciformes;
Gobiesocoidei; Gobiesocidae; Arcos.
                                                                                        270 DWVVVLVSALLFADTKLTIINLFGYAIAIAGVAAYNNHKLKKEASKVVTTETPC
                                                            ---ICGGLLAIAGIAAVLSGKCKYKSSQ--KQHSPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 ERVTLALLLIAG--LTALEANDFF-----ANKDDFFYYDWKNLQLSGLIC---G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteria; Proteobacteria; Gammaproteobacteria; Pasteurellales;
Pasteurellaceae; Pasteurella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 16; Length 456;
                         21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miya M., Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA9C46DB68D4ED0A CRC64;
                                                                                                                                                                                                                                                                                              01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Pypothetical protein PM1417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
NADH dehydrogenase subunit 6.
                                                                                                                                                                                                                                                                                            456 AA
29.0%; Pred. No. 16;
tive 15; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14.9%; Score 68.5; D. 29.7%; Pred. No. 22; ive 14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein; Complete proteome.
SEQUENCE 456 AA; 49349 MW; AA9C46DE6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2003 (TrEMBLrel. 23, Created) 01-MAR-2003 (TrEMBLrel. 23. Last acm
                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=Pm70;
MEDLINE=21145866; PubMed=11248100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00654; voltage CLC; 1.
PRINTS; PR00762; CLCHANNEL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     269 LVKGLAGLSPSKIR 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50 -IAGIAAVLSGKCK 62
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PRT;

N.A.

arity 30.2 Conservative

 \vec{c} 77 RELIMINARY;

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20; Conservative
PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :||:|
295 SAVISSVAHY 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   54 AAVLSGKCKY 63
                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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SEQUENCE 241 AA
                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=1902,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            coelicolor A3(2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hopwood D.A.;
                                                                                                                                                                                                                                                                                                                                      TISSUE=Lung;
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cad gene, TAC8.",
vicad. Soi. U.S.A. 95:9572-9577(1998).
Y: CONTAINS I RING-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LLLLLAGLTALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKCKY
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                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                    eshima H., Endo H., Ishiguro N.B., Inoue J.G., Mukai T.,
(amaguchi M., Kawaguchi A., Mabuchi K., Shirai S.M.,
                                                                                                                                                    ins of higher teleostean phylogenies: A new perspective complete mitochondrial DNA sequences.", let. Evol. 26:121-138(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TrEMBLrel. 08, Created)
[TrEMBLrel. 08, Last sequence update)
[TrEMBLrel. 23, Last annotation update)
[TremBrane spanning receptor TRC8 (Patched related protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  stazoa, Chordata, Craniata, Vertebrata, Buteleostomi, heria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                         2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14.6%; Score 67.5; DB 4; Length 664, 28.6%; Pred. No. 43; ive 11; Mismatches 24; Indels 1E
                                                                                                                                                                                                                                                                                                                                                       14.8%; Score 68; DB 8; Length 173; 30.2%; Pred. No. 8.3; Live 14; Mismatches 28; Indels
                                                                                                                                                                                                                                                                             1.
73 AA; 17892 MW; 5FF3D10C1CBF8A2A CRC64;
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1; Zinc; Zinc-finger.
4 AA; 76007 MW; 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1001841; Znf_ring.
'; zf-C3HC4; 1.
                                                                                                                                                                                                                                          52; BAC23785.1; -.
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(Human)

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SSVAHY 304 SGKCKY 63

STRAIN=A3(2) / M145;
STRAIN=A3(2) / M145;
STRAIN=A3(2) / M145;
Bentley S.D., Chater K.F., Cerdeno-Tarraga A.-M., Challis G.L.,
Bentley S.D., Chater K.F., Cerdeno-Tarraga A.-M., Challis G.L.,
Thomson N.R., James K.D., Harris D.E., Quail M.A., Kleser H.,
Harper D., Bateman A., Brown S., Chandra G., Chen C.W., Collins I.
Cronin A., Fraser A., Goble A., Hidalgo J., Hornsby T., Howarth I.
Huang C.-H., Kleser T., Larke L., Murphy L., Oliver K., Olivei S.
Rabbinowitsch E., Rajandream M.A., Rutherford K., Rutter S.,
Seeger K., Saunders D., Sharp S., Squares R., Squares S., Taylor
Warren T., Wietzorrek A., Woodward J., Barrell B.G., Parkhill J. 01-MAR-2002 (TEBMBLrel. 20, Created)
01-MAR-2002 (TEBMBLrel. 20, Last sequence update)
01-MAR-2003 (TEBMBLrel. 23, Last annotation update)
Patched related protein translocated in renal cancer.
Homo sapiens (Human)
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi 1 MERVILALLLAGLTALEANDPFANKDDPFYYDWK------NLQLSGLICGGLL 243 LTRVTAQATVLMYILRM-----ANETDSFFISWDDFWDLICNLIISG--CDSTL 'Complete genome sequence of the model actinomycete Streptomyces 21; 14.4%; Score 66.5; DB 16; Length 241; 28.4%; Pred. No. 18; Live 15; Mismatches 32; Indels 21. Streptomyces coelicolor. Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales; Streptomycineae; Streptomycetaceae; Streptomyces. Length 664; Indels Strausberg R.;
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BCG21571, 7AH21571.1;
InterPro; IPR001841; Znf_ring.
Fan; PF00097; zf_C3HC4; 1.
SMART; SM00184; NING; 1.
PROSITE; PS50089; ZF RING; 2; 1.
Metal-binding; Zinc; Zinc-finger.
SEQUENCE 664 AA; 75993 MW; 9885F5915F019EF5 CRC64; 01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-Mar-2003 (TrEMBLrel. 23, Last annotation update)
Purative ABC transport system integral membrane protein.
SC01257 OR 2SCG18.04C. 241 AA; 24559 MW; 300F70FACD254926 CRC64; 11; Mismatches 24; DB 4; 241 AA Query Match
14.6%; Score 67.5; 1
Best Local Similarity 28.6%; Pred, No. 43; Nature 417:141-147(2002). EMBL; AL939108; CAB99137.1; -. Best Local Similarity 28.4% Matches 27; Conservative

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                     LAGLTALEANDP---FANKDDPF-----YYDWKNLQLSGLICGGLLAIAGI 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALLLLAGITALEANDPFANKDDPFYYDWKNLQLSGLICGGLLAIAGIAAVLSGKCKY 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.4%; Score 66.5; DB 6; Length 516;
larity 20.1%; Pred. No. 42;
Conservative 14; Mismatches 36; Indels 69; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           cuniculus (Rabbit).
etazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
theria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           M N.A.
ealand White;
9424, BubMed=8647945;
9 A.Y. Boulpaep E.L., Segal A.S., Desir G.V.;
loning of a glibenclamide sensitive, voltage-gated
ennel expressed in rabbit kidney.";
est. 97.2525-2533(1996).
                                                                                                                                                                                                                                                                                              (TrEWBLrel. 01, Created)
(TrEWBLrel. 08, Last sequence update)
(TrEWBLrel. 22, Last annocation update)
e-sensitive voltage-gated potassium channel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Transmembrane.
16 AA; 57430 MW; 795E84998BCA7CAA CRC64;
                                                                                                                    : : ||::
RLSLAAVPQRGRWFAAKLAVIAVPALVVGLAT 114
                                                                                       OKQHSPVPEK------AIPLITPGSAT 87
                                                                                                                                                                                                                                                     516 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EEGGMNHSAFPQ -- TPFKTGNSTATC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----HSPVPEKAIPLITPGSATTC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R003969; Kv channel.
R003011; K channel.
R003131; K channel.
R005820; Mrchannel. Ing.
R003972; Shaker channel.
0; ion_trans; 1.
4; K tetra; 1.
                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R000210, BTB_POZ.
R005821; Ion_trans.
R001622; K+channel_pore.
R004050; KV13channel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            510; KV13CHANNEL.
491; KVCHANNEL.
496; SHAKERCHANEL.
                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25; BTB; 1.
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January 6, 2004, 16:04:06

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Human; signal peptide-containing protein; HSPP; diagnosis; cancer;
                   Human; signal peptide-containing protein; HSPP; diagnosis; cancer; inflammation; cardiovascular disease; anticancer; anti-inflammatory; antimicrobial; nootropic; neuroprotective; cardiovascular; hepatotropic; antiasthmatic; gene therapy; cell proliferation; neurological disorder; reproductive disorder; developmental disorder; arteriosclerosis; cirrhosis; psoriasis; acquired immune deficiency syndrome; anaemia; asthma; Crohn's disease; infection; Alzheimer's disease; schizophrenia; Parkinson's disease; Huntington's diseases; ovulatory defect; muscular dystrophy.
       KW
       KW
      KW
      KW
                     muscular dystrophy.
      KW
     XX
     os
                    Homo sapiens.
     ХX
     PN
                    WO200000610-A2.
     XX
     PD
                    06-JAN-2000.
     ХX
                   25-JUN-1999;
                                                                 99WO-US14484.
    XX
    PR
                   26-JUN-1998;
                                                                 98US-0090762.
                   31-JUL-1998;
                                                                 98US-0094983.
     पूर
                   01-OCT-1998;
                                                                 98US-0102686.
    PR
                   11-DEC-1998;
                                                                98US-0112129
    XX
                   (INCY-) INCYTE PHARM INC.
   XX
    ΡI
                  Lal P, Tang YT, Gorgone GA, Corley NC, Guegler KJ, Baughn MR; Akerblom IE, Au-Young J, Yue H, Patterson C, Reddy R, Hillman
   PI
   ХX
   DR
                  WPI; 2000-160673/14.
   DR
                  N-PSDB; AAZ98143.
   XX
                  New human signal peptide-containing proteins useful in treatment, prevention and diagnosis of e.g. cancer, inflammation and
   PT
   PΤ
                  cardiovascular disease
   PS
                 Claim 1; Page 182; 327pp; English.
  CC
                 AAZ98109 to AAZ98242 encode AAY87224 to AAY87357 which represent the
               AAZ98109 to AAZ98242 encode AAY87224 to AAY87357 which represent the human signal peptide-containing proteins HSPP-1 to HSPP-134. HSPPs have anticancer, anti-inflammatory, antimicrobial, nootropic, hepatotropic, neuroprotective, Cardiovascular and antiasthmatic activities, and can be used in gene therapy. HSPPs can be used to treat or prevent disorders associated with decreased activity or function of HSPP. Antagonists of HSPP are used to treat or prevent disorders associated with increased activity or function of HSPP. Such diseases include cell proliferation (including cancer). inflammation. cardiovascular. neurological.
  CC
 CC
             activity or function of HSPP. Such diseases include cell proliferation (including cancer), inflammation, cardiovascular, neurological, reproductive or developmental disorders, (e.g. arteriosclerosis, cirrhosis, psoriasis, acquired immune deficiency syndrome, anaemia, asthma, Crohn's disease, microbial or other infections, congestive or ischaemic heart disease, Alzheimer's, Parkinson's or Huntington's diseases, schizophrenia, ovulatory defects, muscular dystrophy). HSPP nucleic acids can be used for the recombinant production of HSPP, for detecting HSPP in standard hybridisation and amplification assays (for diagnosis and monitoring), in gene therapy, as antisense, triplex-forming or ribozyme therapeutics, for detecting related sequences or genetic variations, and for chromosomal mapping. HSPP are also used to raise specific antibodies (Ab) and to screen for agonists and antagonists (potential therapeutic agents). Ab are used to diagnose, or monitor, HSPP-related diseases (in usual immunoassays), as therapeutic antagonists, in competitive drug screens, and for purification of HSPP from natural sources.
 CC
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              Sequence
                                                                           100.0%; Score 461; DB 21; Length 89; 100.0%; Pred. No. 1.2e-50; tive 0; Mismatches 0; Indels
     Best Local Similarity
     Matches
                                  89; Conservative
                                                                                                                                                                                                0; Gaps
                                 61 CKYKSSQKQHSPVPEKAIPLITPGSATTC 89
||||||||||||||||||||||||||||||||||61 CKYKSSQKQHSPVPEKAIPLITPGSATTC 89
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